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Proof of Evidence of Clive Burbridge

Transport and Works Act 1992: Application for the proposed Network Rail (Essex and Others Level Crossing Reduction) Order.

Network Rail (NR) Crossing Ref: E29
DTLR Ref: OBJ/105

Volume 1

Iceni Projects Limited on behalf of I2

Development Management

September 2017

ICENI PROJECTS LIMITED ON BEHALF OF I2 DEVELOPMENT MANAGEMENT

Proof of Evidence of Clive Burbridge
TRANSPORT AND WORKS ACT 1992: APPLICATION FOR THE PROPOSED NETWORK RAIL (ESSEX AND OTHERS LEVEL CROSSING REDUCTION) ORDER.

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1. QUALIFICATIONS AND EXPERIENCE

1.1. My name is Clive Burbridge; I am a member of the Royal Town Planning Institute (MRTPI), Chartered Institution of Transportation (MCIT) and Chartered Institute of Logistics and Transportation (MCILT). I hold a BSc (Hons) in “Planning and the Environment”, together with a MSc in “Transportation Planning and Management”.

1.2. I am an equity Director of Iceni Projects Ltd and a Director of Transportation, advising clients in both the public and private sectors on transportation and highway matters relating to proposed and existing developments. In addition to circa 7 years’ experience with Iceni Projects Ltd, my past experience covers circa 15 years with Waterman Boreham Ltd (previously Boreham Consulting Engineers Ltd), where I was a Technical Director in charge of the company’s largest transport planning team and 5 years with Kent County Council dealing with matters of transportation planning, development control, highway improvement schemes and accident remediation works. I also attended the RoSPA Road Safety Engineering Accident Investigation and Prevention two-week course (full days including evenings) in July 1995, which has continued to inform my engineering judgements/experience.

1.3. I can confirm I have a full understanding of my duty to the Inquiry and have complied, and will continue to comply, with that duty. I confirm that this evidence identifies all facts which I regard as being relevant to the opinion that I have expressed and that the Inquiry’s attention has been drawn to any matter, which would affect the validity of that opinion. I believe that the facts stated within this proof are true and that the opinions expressed are correct.

1.4. My evidence has been prepared in objection to the proposal to close the pedestrian level crossing at West Horndon, known as crossing E29 Brown & Tawse, without provision for an adequate and safe alternative route for the diversion pedestrian footpath.

1.5. Network Rail initially consulted on two alternative diversions, to facilitate the closure of E29 Brown & Tawse level crossing. Following further investigation the eastern route via St Marys Lane (red route) was deemed unviable due to risk of vehicle and pedestrian conflict. As a result the western route via Childerditch Lane (blue route) is currently being promoted. My evidence will demonstrate that the blue route shares many of the same highway safety concerns as the red route and that an alternative solution is available to Network Rail. I will show that the current proposal is merely seeking to remove the risk of conflict at the level crossing from Network Rail’s responsibility and relocate this risk to the highway authority without proper regard to mitigation of the risks.

1.6. My evidence in Section 2 firstly deals with the existing Network Rail proposals and the relevant history. I then go on to explain my own highway safety concerns with the conclusions reached by

Network Rail with regard to the promotion of the alternative footpath diversion (blue route). I will finally suggest an alternative solution, which would remove the risk of conflict between pedestrians, and vehicles/trains rather than transfer this risk to an alternative location, as is currently the case. In Section 3, of my Proof of Evidence I set out my conclusions, which are also a summary of my evidence.

2. NETWORK RAIL PROPOSALS AND RELEVANT SAFETY CONCERNS

2.1. In order to provide context to my evidence I will start by briefly summarising the existing situation and current proposals put forward by Network Rail (NR) for the diversion of public footpath (No.4) in order to facilitate the closure of level crossing E29 Brown & Tawse.

2.2. In June 2016, as part of the Anglia Level Crossing Reduction Strategy, Network Rail consulted on two alternative diversions of the public footpath No 4 in order to close level crossing E29. The original routes are attached at Appendix A1 for ease of the inquiry. The eastern route (red route) realigned the footpath on a new right of way in an east/west direction parallel and south of St Marys Lane. The pedestrian would then re-route onto the north/south section of St Marys Lane in order to cross the railway line via the existing highway bridge, before continuing north along the eastern and northern side of Horndon Industrial Park to re-join the original footpath alignment. An alternative solution was also considered (but dismissed), which would be to use the existing station footbridge, a decision I would also agree with given it does not conform with the requirements of the Equality Act 2010.

2.3. The second option being considered was to consider a western (blue route) realignment of the footpath, which would divert along a new right of way parallel and south of the railway line, crossing the railway line via the Childerditch Lane existing highway bridge, continuing along Childerditch Lane to the northwest corner of the existing industrial estate before turning and running parallel to the industrial estate boundary to re-join the existing footpath. This route runs through lane currently allocated for industrial development. NR at the time of consultation stated that “The requirement for a footway and narrow nature of the road requires further consideration, in particular whether mitigation measures are necessary for pedestrian safety”. It is clear at the time NR were aware of the potential risk of pedestrian and vehicle conflict with this route.

2.4. Following initial consultation on the routes, NR dropped the red route and offered amendments to the blue route, which in terms of pedestrian safety (or lack of) fundamentally remained the same. The change to the blue route being to the south of the railway line where pedestrians would continue along the complete length of the southern section of Childerditch Lane to the junction of St Marys Lane, where a new footpath would run east/west on the north side of St Marys Lane, virtually parallel to the road. The revised route for reasons unknown was never pursued and NR revert to the blue route alignment which formed part of the initial consultation, with minor modifications

2.5. The final changes to the blue route was to introduce steps either side of Childerditch Lane railway bridge and provided a new footpath along the northern section of Childerditch Lane within the field

boundary before crossing the road again to continue along the northern boundary of the industrial estate. This introduces the need for 3 crossings of local roads in the local area compared to only 1 currently required for Footpath 4.

2.6. When considering the safety of the proposed closure of the level crossing and a diversion of the route, it is accepted that the existing level crossing presents a potential risk to pedestrian safety and an alternative route should be considered. However this alternative should represent an improvement in highway safety/risk to pedestrians and not seek to relocate the problem/risk onto the highway authority.

2.7. At NR Statement of Case, Folder 02, Section NR16, road safety audits have been provided of the alternative routes proposed for each level crossing. The following comments were identified by the auditors which resulted in the red route being withdrawn due to safety issues and the blue route being promoted as the alternative solution.

2.8. Page 12 of Section NR16: “It is a problem that pedestrians will walk along a section of St Marys Lane where no footway or notable verge is present; this will result in pedestrians walking in the carriageway. A high volume of traffic was observed on St Marys Lane travelling at high speeds and visibility is restricted by the highway geometry and the railway road bridge. These factors may result in collisions between pedestrians and vehicles.” Recommendation of the report being: “that a suitable footway is provided or that the blue route option is utilised”.

2.9. Page 15 of Section NR16: “On St Marys Lane to the east of the existing footpath no verge is present and pedestrians would have to walk in the carriageway. A high Volume of traffic was observed on St Marys Lane travelling at high speeds and visibility is restricted around the bend. These factors could result in conflict between pedestrians and vehicles”. Recommendation of the report being: “A suitable footway should be provided otherwise an alternative route should be identified”.

2.10. Page 16 of Section NR16: “It is proposed that pedestrians will walk along a section of St Marys Lane where no footway or notable verge is present; this will result in pedestrians walking in the carriageway. A high volume of traffic was observed on St Marys Lane travelling at high speeds and visibility is restricted by the highway geometry and the railway road bridge. These factors may result in collisions between pedestrians and vehicles”. Recommendation of the report being: “that a suitable footway is provided or that the Blue Route Option is utilised”.

2.11. Page 16 of Section NR16 goes on to consider the Blue Route and the audit team state that “The Audit Team did not identify any road safety related issues associated with the scheme”. I find it difficult to understand how a safety audit, which is intended to be independent under the professional code of conduct and audit guidance (DMRB HD 19/02 Road Safety Audit and CIHT Road Safety Audit 2008) can possibly come up with this conclusion when many of the findings for the red route are equally applicable to the blue route.

2.12. To explain my concerns further I have provided a summary table below which identifies the road safety auditors points of concern with regard to the red route, compared to the blue route currently being promoted by NR.

Table 2.1 – Comparison of Safety Auditor Comments in relation to Red and Blue Routes

Item/Issue	Red Route	Blue Route	Comment
Use of road with no verge or footway	Audit found this to be a road safety concern.	The same road safety concerns applies to the Blue Route over the railway bridge section, where pedestrians are forced to cross the road either side of the blind summit.	Both solutions utilise road space with no footways or verge. The Blue also introduces the risk of conflict with pedestrians crossing the road either side of the blind summit.
High number of vehicles	This route certainly has more traffic, but the flows are relatively light.	This route does have lower traffic flows but is located near an industrial estate where a high proportion of HGVs can be expected.	Both have relatively light flows in real terms.
High Traffic speeds.	The actual speed of vehicles along the road is restricted due to bends in either direction, which slow the drivers approach.	The observed speed of vehicles appears greater, which is to be expected given the straight geometry of the road with no bends to slow the driver approach.	The blue route is subject to higher vehicle speeds, which was a concern to the auditors for the red route. The blue route also forces pedestrians to cross either side of the blind summit.
Lack of visibility due to road alignment	The current road bridge has a blind	The current road bridge has a virtually	Both routes have almost the same

including the bridge. See Appendix A2.	summit and also the bend restricts forward visibility to the north of the bridge	(possibly worse) blind summit, where NR is now proposing to cross pedestrians either side of the blind summit.	issue with visibility. The red route also suffering from the bend. The blue route also introduces the risk of conflict with pedestrians crossing the road either side of the blind summit.
Road width. See Appendix A2.	St Marys Lane carriageway width is 5.9m across the bridge, which was considered of concern by the auditors	Childerditch Lane carriageway width is 4.8m across the bridge	The blue route has narrower road widths and the risk of sideswipe from vehicles is arguably greater.

2.13. In addition to the safety auditors comments it is worth noting that the blue route incorporates wooden steps to allow pedestrians to join Childerditch Lane close to the railway bridge either side of the line. Network Rail dismissed use of the existing bridge at the station, as it was not complaint with the Equality Act, yet the same issues would relate to the introduction of steps on a blue route. The current alignment over the level crossing is free of such restrictions. Further pedestrians would alight on Childerditch lane on a narrow section of road, south of the railway bridge and directly into the flow of traffic approaching blind over the bridge. The same issue is also true north of the railway bridge. Given the lack of verge and footway over the bridge with severely restricted forward visibility for drivers, this presents a potential conflict, which has been ignored.

2.14. As can be seen from the paragraph above and the summary table above, the reasons provided by NR for dropping the red route and promoting the blue route is based on a misconception over the potential risk of conflict. As a result, the risk of conflict at the level crossing is merely being transferred to another location, which arguably has a greater likelihood for conflict. There does however appear to be a viable solution available to NR to mitigate the risk of conflict and allow the closure of the level crossing.

2.15. As shown as Appendix A3 NR have control over a large area of land around the station. With the ownership within their control and the provision of similar footway diversions to those originally promoted with the red route (the sections found acceptable to the auditors) it is within the power of Network Rail to provide a new footway pedestrian bridge over the railway to the east of the existing St Marys Lane vehicular bridge. This pedestrian footbridge crossing with realigned footpath would offer a route free of conflict/risk. The only point at which conflict between pedestrians and vehicles

could occur would be the crossing of Station Road to the east of the station access, which is a safer location to cross than the existing footpath on St Marys Lane, thus not only removing the risks of the level crossing, but also improving further on highway safety. The current proposals for the blue route would incorporate 3 crossings of local roads, compared to 1 on the existing route and 1 safer crossing on the alternative suggested route being put forward in my proof. As such the blue route introduces further risks of conflicts which done currently exisit.

2.16. Should the inspector agree with my concerns and recommendation, the opportunity also exists to widen this structure to accommodate cyclists who may currently walk along the footpath to the industrial estate and who would now be able to cycle.

3. SUMMARY AND CONCLUSIONS

3.1. My evidence has been prepared in objection to the proposal to close the pedestrian level crossing at West Horndon, known as crossing E29 Brown & Tawse, without an adequate and safe alternative route for the diversion pedestrian footpath.

3.2. Network Rail initially consulted on two alternative diversions, to facilitate the closure of E29 Brown & Tawse level crossing. Following further investigation the eastern route via St Marys Lane (red route) was deemed unviable due to risk of vehicle and pedestrian conflict. As a result the western route via Childerditch Lane (blue route) is currently being promoted. My evidence demonstrates that the blue route shares many of the same highway safety concerns as the red route and that an alternative solution is available to Network Rail. I have shown that the current proposal is merely seeking to remove the risk of conflict at the level crossing from Network Rail's responsibility and relocate this risk to the highway authority without proper regard to mitigation of the risks.

3.3. Following initial consultation on the routes, NR dropped the red route in favour of the blue route with amendments.

3.4. When considering the safety of the proposed closure of the level crossing and a diversion of the route, it is accepted that the existing level crossing presents a potential risk to pedestrian safety and an alternative route should be considered. However this alternative should represent an improvement in highway safety/risk to pedestrians and not seek to relocate the problem/risk onto the highway authority.

3.5. Network Rail's own safety audit identified a number of issues with the red route, which I maintain are shared with the blue route. These included:

- "It is a problem that pedestrians will walk along a section of St Marys Lane where no footway or notable verge is present; this will result in pedestrians walking in the carriageway. A high volume of traffic was observed on St Marys Lane travelling at high speeds and visibility is restricted by the highway geometry and the railway road bridge. These factors may result in collisions between pedestrians and vehicles." The blue route uses Childerditch Lane, which also has no footways or verge over the bridge. The blue route also suffers poor forward visibility due to the bridge, where pedestrians are forced to cross either side of the blind summit.

- "On St Marys Lane to the east of the existing footpath no verge is present and pedestrians would have to walk in the carriageway. A high Volume of traffic was observed on St Marys Lane travelling at high speeds and visibility is restricted around the bend. These factors

could result in conflict between pedestrians and vehicles". Childerditch Lane suffers higher vehicle speeds.

- "It is proposed that pedestrians will walk along a section of St Marys Lane where no footway or notable verge is present; this will result in pedestrians walking in the carriageway. A high volume of traffic was observed on St Marys Lane travelling at high speeds and visibility is restricted by the highway geometry and the railway road bridge. These factors may result in collisions between pedestrians and vehicles". Childerditch Lane is notably narrower with higher vehicle speeds than St Marys Lane and as such the risk of sideswipes from cars given the lack of verge or footway is arguably greater.

3.6. Beyond the auditor comments the blue route introduces steps either side of the bridge on the proposed public right of way, where none previously existed. This will restrict the use of the public right of way to more able-bodied users and arguably is contrary to the Equality Act. In addition pedestrians would alight on Childerditch Lane, which is narrow, south and north of the bridge into the path of oncoming vehicles, which would be approaching over the brow of the blind summit, unable to see the pedestrians in the road. In the absence of a footway or verge, there is a serious risk of conflict and safety to users of the footpath. It is also worth noting that a car driver's eye position, especially those in sports cars is relatively low to the road when compared to pedestrians. Given the likely speed of vehicles and blind summit there is a risk of collision with the pedestrians.

3.7. The risk of conflict at the level crossing is merely being transferred to another location, which arguably has a greater likelihood for conflict. There does however appear to be a viable solution available to NR to mitigate the risk of conflict and allow the closure of the level crossing.

3.8. NR has control over a large area of land around the station. With the ownership within their control and the provision of similar footway diversions to those originally promoted with the red route (the sections found acceptable to the auditors), it is within the power of Network Rail to provide a new footway pedestrian bridge over the railway to the east of the existing St Marys Lane vehicular bridge. This pedestrian footbridge crossing with realigned footpath would offer a route free of conflict/risk. The only point at which conflict between pedestrians and vehicles could occur would be the crossing of Station Road to the east of the station access, which is a safer location to cross than the existing footpath on St Marys Lane, thus not only removing the risks of the level crossing, but also improving further on highway safety. Such an alignment would link to the station and local bus stops providing greater accessibility and integrating the public right of way with establish transport connections. Should the inspector agree with my concerns and recommendation, the opportunity also exists to widen this structure to accommodate cyclists who may current walk along the footpath to the industrial estate and who would now be able to cycle.

3.9. In conclusion, the blue route shares the same characteristics as the red route, which has been dismissed as a viable option by Network Rail's safety audit team. It therefore stands to reason that the blue route would only relocate the risk from Network Rail's land (level crossing) on to the public

highway where it becomes someone else's problem. A solution is available to Network Rail, which would allow an alternative route to be provided.