

The Proposed Network Rail (Essex and  
Others Level Crossing Reduction) Order  
Department for Transport Reference:  
TWA/17/APP/05

**Rebuttal of Susan Tilbrook's Proof of  
Evidence**

**OBJ/148/019 JNR Rebuttal**

for

The Ramblers Association

## Document Control Sheet

Rebuttal of Susan Tilbrook's Transport Proof of Evidence

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This document has been issued and amended as follows:

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## 1.0 Introduction

- 1.1 My name is John Norman Russell. I am a Chartered Transport Planner, being a Chartered Member of the Institute of Logistics and Transport (CMILT) and a Member of the Institution of Highways and Transportation (MIHT). I have an Honours Degree in Civil Engineering. I have worked in the field of transport planning and highway design for 25 years.
- 1.2 I am a Technical Director of Motion Consulting based in Guildford, Surrey which specialises in transport planning, traffic engineering and highway design.
- 1.3 I advise the Ramblers Association on matters of highway design and safety with respect to the Proposed Network Rail (Essex and Others Level Crossing Reduction) Order (hereafter referred to as "the Order") which seeks to close a number of level crossings on footpaths within the Essex area and replace them with alternative pedestrian routes. The Order is made by Network Rail (NR).
- 1.4 I have prepared this rebuttal evidence to set out the main points of dispute with Susan Tilbrook's (ST) proof of evidence (reference NR32/1).
- 1.5 I have not provided comment on every paragraph of ST's evidence or other NR evidence. Any lack of comment should not be taken as my agreement with the views expressed.
- 1.6 My rebuttal considers the following matters:
  - a. In Section 2 I reiterate general comments I have already raised in my evidence (OBJ/148/019) and which are not addressed in ST's evidence;
  - b. In Section 3 I make general comment regarding the suitability of Network Rail's (NR) Stage 1 Road Safety Audit (RSA1) in the context of ST's references to it.
  - c. In Section 4 I present my audit of, assessment of and conclusions regarding each of the proposed closures having regard to the evidence submitted by ST.
  - d. In Section 5 I set out my updated conclusions for each of the proposed closures I have considered. I identify if and how these have changed from the conclusions in my evidence following a review of ST's evidence.

## 2.0 General Matters

### *Use of highway verges*

- 2.1 Several of the closures result in diversions which utilise highway verge to prevent pedestrians having to walk in the carriageway. On Section 1 of my evidence I note that:
- a. Some of the diversions proposed by NR utilise land which NR claims to be “highway” land. I provide an example in my evidence of apparent highway verge which transpired was not highway verge and note that NR does not provide any evidence to support their claim that land they state is highway is actually highway. I recommended that the Inspector sought evidence from NR to confirm that all diversions purporting to utilise highway land were in fact on highway land and not 3<sup>rd</sup> party land adjacent to the highway;
  - b. NR does not own or control highway verge. NR does not explain how NR intends to secure the retention of highway verges utilised in diversion routes as verge for use by pedestrians. I recommended that the Inspector sought evidence from NR concerning how they intended to secure the retention of grass verges in the long term which are to be utilised for diverted routes to prevent the need for pedestrians to walk in the carriageway, including any correspondence with the relevant highway authority in this respect; and
  - c. NR does not maintain highway verges. I was unable to find evidence submitted by NR explaining how they intended to ensure that grass verges utilised for diverted routes were to be kept maintained and fit for use. I recommended that the Inspector sought evidence from NR concerning how they intended to ensure maintenance of grass verges in the long term which are to be utilised for diverted routes, including any correspondence with the relevant highway authority in this respect.
- 2.2 Having reviewed ST’s evidence I note that her evidence does not provide direct answers to any of the above queries. In contrast, ST notes at paragraph 2.23.29, that:
- “The maintenance of the verges for road walking is the responsibility of the local authority.”*
- 2.3 I understand this to mean that NR has no intention of securing either the short term or the long-term safety of diversion routes for pedestrians where these require initial improvements to highway verge and / or long-term highway verge maintenance.
- 2.4 In this context I would again urge the Inspector to seek assurance from NR that they are in a position to deliver new footway and / or retain highway verge for use by pedestrians.

### *Signage*

- 2.5 For routes which divert pedestrians along roads it is critical that the diversions are adequately signed so that pedestrians spend as little time as necessary walking with live traffic. In the absence of clear signage there is a risk that pedestrians will continue walking along a road rather than following the diversion and thereby increase their risk of accident. I have been unable to find details or an explanation in ST’s evidence regarding how the diversion routes will be signed. I would again urge the Inspector to seek evidence from NR concerning how they intend to sign diversion routes and ensure the long-term maintenance of the signs.

### 3.0 Network Rail's Road Safety Audit

- 3.1 The primary concern I raised in my evidence regarding NR's RSA1 of the proposed diversions is that they were undertaken without the benefit of or opportunity to analyse road collision data, traffic flows, non-motorised user (NMU) flows and road traffic speeds.
- 3.2 I note that within ST's evidence that traffic speed and volume data together with NMU volumes and road collision data has been provided for some, but not all, of the proposed closures.
- 3.3 However this data does not appear to have been collected for all the proposed closure sites and neither does it appear to have been provided to the road safety auditor to allow them to review the RSA1. I do not know why the data that has been collected has not been provided to the road safety auditor as it would have greatly benefitted the auditor in undertaking the RSA1 and could potentially alter the recommendations of the RSA1.
- 3.4 In this context I would invite the Inspector to recommend that the Order is either rejected or a decision deferred until this data has been provided to the road safety auditor, the RSA1 updated based on the data and that interested parties have had an opportunity to review and comment on the revised RSA1.

## 4.0 Audit and Assessment of Proposed Closures

### Site E04 – Parndon Mill

- 4.1 My recommendation for proposed diversion E04 is that it is acceptable in terms of safety for pedestrians subject to the suggested modification below.
- “...divert the footpath through Harlow rugby club to join Parndon Mill Lane adjacent to St. Mary the Virgin church is pursued. This would remove the section of Parndon Mill Lane on the route which is considered to pose a risk to pedestrians walking in the carriageway.”
- 4.2 The reason for this modification is that the section of Parndon Mill Lane between Elizabeth Way and the entrance to the Harlow rugby club is only just wide enough for two cars to pass if one is willing to pull slightly into the hedgerow leaving no space for pedestrians to wait safely. It is also the section where drivers are least likely to be looking for pedestrians in the carriageway as they will be more likely to be concentrating on vehicles turning at the junction of Parndon Mill Lane and Elizabeth Way.
- 4.3 Having reviewed ST’s evidence I note that this suggested modification is referred to at paragraph 2.3.11b. The reason for discounting this route is stated as:
- “...unknown timescales for delivery of the development...”
- 4.4 I assume that ST is referring to planning application HW/PL/14/00361 which allows the erection of up to 125 dwellings on land on the corner of Parndon Mill Lane and Elizabeth Way (“the Permitted Development”). Planning application HW/CND/17/00263 provides, inter alia, the most recent detail of the permitted development layout which is provided at **Appendix A**.
- 4.5 The plan provided at **Appendix A** demonstrates that there is scope for a PRoW to be provided through the Permitted Development. This could be achieved either:
- a. through the Permitted Development along Road 6, Road 3 and Road 1 then continuing due east through the POS to connect to Parndon Mill Lane; or
  - b. following the proposed route along Elizabeth Way as far as the entrance to the Permitted Development then diverting into the Permitted Development. The route would follow Road 1 north-easterly then turn due east through the POS to connect to Parndon Mill Lane.
- 4.6 Either of these two routes would satisfy my concerns regarding road safety for pedestrians walking in the carriageway of Parndon Mill Lane between the Rugby Club and Elizabeth Way and I invite the Inspector to recommend that NR secures one or other of them should this closure be allowed.

### Site E10 – Dixies, Newport

- 4.7 Having reviewed ST’s evidence I note at paragraph 2.9.14 that ST raises “potential issues” about pedestrians walking in the carriageway of Bury Water Lane which I also raise at paragraph 4.23 of my evidence. I raised at paragraph 4.26 of my evidence my concern that pedestrians may continue along Bury Water Lane past the diversion route (which crosses Bury Water Lane) and into the narrow section of the lane to the east on which there are no footways. This is because the route along Bury Water Lane is shorter than the proposed diversion route for pedestrians walking east-west and vice versa.
- 4.8 At paragraph 2.9.17 ST notes that 85<sup>th</sup> percentile traffic speeds were recorded at 30.3mph notwithstanding traffic was in a 20mph zone. This indicates that there is wide spread abuse of traffic management along Bury Water Lane even though there is very clearly a school and very clearly a significant number of school children. This reinforces the concerns I raised regarding pedestrians crossing Bury Water Lane to follow the proposed diversion or else walking along Bury Water Lane.

- 4.9 In order to reduce the road safety risks for pedestrians compelled to negotiate Bury Water Lane due to the closure of the level crossing, I recommended that a pedestrian crossing facility is located on Bury Water Lane where the proposed footpath diversion crosses it. This would have the twofold safety benefit of reducing the width of road that pedestrians are required to cross in one go and reinforce the suitable and safe diversion route for pedestrians rather than following Bury Water Lane.
- 4.10 In the acknowledgement of ST's evidence regarding the safety of Bury Water Lane and my evidence, I would invite the Inspector to recommend my suggested modification of a crossing facility to be provided on Bury Water Lane to minimise road safety risks for pedestrians following the proposed diversion route.
- 4.11 To the best of my knowledge NR has not considered potential child safeguarding issues relating to a PRoW leading through a school. I would also invite the Inspector to seek expert advice on child safeguarding issues and, if necessary, recommend that NR secures a segregated section of footpath on footpath EX/41/4 where it passes close to or within the school grounds so that secure fencing can be erected between the public footpath and the school.

### Site E54 – Bures

- 4.12 At paragraph 2.40.14 ST states:
- "It is noted that use of the footway on the north side of the road is currently used by pedestrians access the road bridge from all directions and this existing use will continue,...."* [sic.]
- 4.13 However this is for existing pedestrians who currently choose to do so. The closure of the crossing E54 and diverting the existing footpath would compel pedestrians - who may prefer to use the railway crossing - to cross at a location on the highway network where visibility is poor resulting in an unsafe crossing point.
- 4.14 I note that at paragraph 2.40.13 ST confirms that there has been no safety audit undertaken of this route. I also note that there is no traffic volume or speed data. On the basis of ST's acknowledgement of this, I would invite the Inspector to recommend that this proposed closure is rejected or in the alternative, to defer a decision on this proposed closure until an RSA1 has been prepared and submitted for scrutiny with the RSA1 prepared with the benefit of traffic volume and speed data, collision data and NMU data rather than leaving assessment of this data for the stage 2 RSA.
- 4.15 Notwithstanding this, given the village setting and the fact that westbound traffic is travelling around a blind corner under a railway bridge, I would assume that speeds are typically contained within the 30mph. Guidance set out in Table 10.1 of Manual for Streets 2 (September 2010) identifies that the reaction time of a driver travelling less than 60kph is 1.5 seconds. I have provided a copy of Table 10.1 below.

Design Speed	Vehicle Type	Reaction Time	Deceleration Rate	Comments
60kph and below	Light vehicles	1.5s	0.45g	
	HGVs	1.5s	0.375g	See 10.1.9
	Buses	1.5s	0.375g	See 10.1.10
Above 60kph	All vehicles	2s	0.375g (Absolute Min SSD)	As TD 9/93
	All vehicles	2s	0.25g (Desirable Min SSD)	As TD 9/93

Table 10.1: Summary of Recommended SSD Criteria



- 4.16 At 30mph and reacting within the guidance reaction time of 1.5 seconds, a vehicle would travel 20m during the 1.5 seconds between a driver spotting a pedestrian and the driver starting to brake. Braking distance is then added on top of the 20m travelled by the vehicle between the time the driver spots a pedestrian and the driver starts to brake. There is less than 20m visibility from a pedestrian waiting to cross on the western side of the railway bridge from the south side to the north side of Station Road.
- 4.17 This means that there is insufficient time for the driver of a vehicle travelling westwards to see a pedestrian following the diversion from Parsonage Hill to the Paddocks and compelled to cross the road to the west of the Station Hill railway bridge, to react to seeing that pedestrian and to subsequently stop.
- 4.18 There is nothing in ST's evidence that acknowledges this situation is a safety concern and so no mitigation is suggested for it. The mitigation suggested by NR for this proposed diversion is all on the northern side of Station Hill compelling pedestrians to make this dangerous crossing in order to reach it.
- 4.19 For this reason I would invite the Inspector to recommend that this proposed closure is rejected because the alternative pedestrian route is unsafe.
- 4.20 Turning to the details of the proposed mitigation, I note that ST refers to the provision of a new footway to the north of Station Hill. As set out in my evidence at paragraph 4.35, I am not convinced that there is sufficient width within highway land to provide the new section of footway as stated by NR. ST does not provide any further details to demonstrate that the footway is deliverable.
- 4.21 I note ST's comments at paragraph 2.40.2 that the accessibility of the existing footpath is such that it prohibits wheelchairs users and other protected groups defined in the 2010 Equality Act (2010 EA) from using the crossing. Nonetheless I understand that the proposed new section of footway would form part of the adopted highway. In this context I would expect to see agreement from the highway authority that they would accept the provision of a footway that fails to meet the requirements of the 2010 EA.
- 4.22 In the event that the Inspector should be minded to recommend that this proposed closure be allowed, I would urge the Inspector to seek details of the footway from NR to ensure that it is deliverable and confirmation from NR that they have agreement in writing from the highway authority regarding the provision of the proposed new section of footway.

#### Site E48 – Wheatsheaf, Wrabness

- 4.23 ST's evidence provides traffic speed and volume data at paragraph 2.36.21. This states that there were 135 vehicles per day recorded with an 85<sup>th</sup> percentile speed recorded at 31.5mph. I note that the national speed limit applies at the location that the traffic survey was undertaken not a 40mph speed limit as reported by ST.
- 4.24 As I state at paragraph 4.41 of my evidence, Station Road to the west of Church Lane is an unlit rural road subject to the national speed limit (60mph in this instance) and is between 3.4 and 3.8m wide. Visibility along Station Road is restricted due to a combination of curvature of the road and hedgerows, which flank both sides of the road. These physical restrictions will influence driver behaviour. The recorded 31.5mph 85<sup>th</sup> percentile speed on this section of lane, where it is lawfully permitted to drive at 60mph, reinforces the restricted visibility along the lane and the narrowness of the lane, which appears to have influenced most drivers to travel slower than they otherwise would do.

4.25 It is acknowledged that daily traffic flows are low on this section of Station Road and so the likelihood of two vehicles meeting is low. However due to the narrow width of the lane and the lack of verges, the safe passage of a car and a pedestrian (or group of pedestrians) relies on the car driver and the pedestrian (s) seeing each other in sufficient time to be able to move to opposite edges of the carriageway. Given the restricted visibility along the lane due to the hedgerows that flank both sides of the lane, there is a significant risk that drivers and pedestrians will not see each other in sufficient time to react. This is particularly the case for a group of walkers following the route who would be unlikely to be walking in single file.

4.26 For this reason I would invite the Inspector to recommend that this proposed closure is rejected because the alternative pedestrian route is unsafe.

#### Site E38 – Battlesbridge, Rettendon

4.27 I consider that the proposed diversion route is acceptable in terms of road safety subject to a mechanism to ensure retention and maintenance of a grass verge or footway.

#### Site T01 – No 131, Thurrock

4.28 I consider that the proposed diversion route is acceptable in terms of road safety.

#### Site E29 – Brown and Tawse, West Homdon

4.29 For proposed diversion E29, I considered that the proposed diversion route was acceptable subject to the following modifications:

- a. Narrowing of carriageway over the railway bridge with the introduction of priority working for traffic.
- b. Provision of protected strip on the railway bridge for pedestrians for example through use of textured road markings or physical features such as orcas.

4.30 Having reviewed ST's evidence, no such modifications are proposed by NR.

4.31 NR's own road safety auditors raised concerns regarding the lack of verge or footway on St. Mary's Lane when considering an earlier option for this diversion (referred to as "the Red Route") stating:

*"It is proposed that pedestrians will walk along a section of St Mary's Lane where no footways or notable verge is present; this will result in pedestrians walking in the carriageway. A high volume of traffic was observed on St Mary's 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."*

Source: page 12 of the Transport & Works Act Order (TWAO) Anglia Route GRIP 2 Review. Essex Stage 1 Road Safety Audit.

4.32 I agree with this conclusion of NR's road safety auditors. I also note that that ST agreed with the recommendation of the independent road safety auditor in NR's design team response to the RSA1 stating on page 16 of the response:

*"Agreed – An appropriate width footpath could not be achieved. The route was amended to provide a suitable off-road footpath to the south of Saint Mary's Road as a safer alternative."*

4.33 The railway bridge on Childerditch Lane is also humped, and more severely than on St. Mary's Lane, which interrupts visibility between pedestrians and on-coming motorists either side of the bridge (see photograph 1).



Photograph 1 – Childerditch Lane looking south over the railway bridge to St. Mary's Lane

- 4.34 Childerditch Lane where it crosses the railway is narrower than the railway bridge on St Mary's Lane referred to by NR's safety auditors. ST confirms that the recorded 85th percentile speed of traffic on Childerditch Lane is 42.6mph: at this speed a pedestrian is more than 5.5 times likely to be killed if hit by a car than if the car is travelling below 30mph.
- 4.35 Due to vehicle speed and bridge geometry, NR's own auditors conclude that pedestrians crossing in the carriageway at St. Marys may result in collisions between pedestrians and vehicles. Given that the geometry of the Childerditch railway bridge is even more restricted than the St. Mary's Lane railway bridge and that traffic speeds on Childerditch Lane are in excess of 40mph, I conclude that pedestrians walking in the carriageway crossing the railway bridge at Childerditch Lane are at more risk of being hit by a vehicle than if they were crossing at St. Mary's Lane.
- 4.36 My recommendation for proposed diversion E29 remains that the diversion is generally acceptable in terms of pedestrian safety subject to the following modifications
- a. Narrowing of carriageway over the railway bridge with the introduction of priority working for traffic.
  - b. Provision of protected strip on the railway bridge for pedestrians for example through use of textured road markings or physical features such as orcas.
- 4.37 In the absence of these modifications, or alternatively the provision of a dedicated pedestrian bridge crossing of the railway line, I would invite the Inspector to recommend that this proposed closure is rejected because the alternative pedestrian route is unsafe.

#### **Site E28 – Whipps Farmers, Brentwood**

- 4.38 NR's safety auditors identify the lack of footway or notable verge on St. Mary's Lane as a safety concern for this diversion. NR's safety auditors therefore recommended that:
- "... a suitable footway is provided...."*
- 4.39 At paragraph 2.23.28, ST states that the RSA "suggested" that a new footway should be provided. This is incorrect. The RSA "recommended" that a new footway should be provided and it is the responsibility of the designer to either accept the recommendation or else provide evidence explaining why the recommendation has not been accepted.

- 4.40 At paragraph 2.23.29 ST concludes that St. Mary's Lane must be used at present by pedestrians. This appears to be the evidence that ST relies on to reject the recommendation of the independent road safety auditor.
- 4.41 In contrast I agree with the concerns of the independent road safety auditor regarding the safety of pedestrians walking along St. Mary's Lane.
- 4.42 I also agree with the recommendation of the independent road safety auditor regarding the provision of a suitable footway.
- 4.43 Notwithstanding this my view is that safety for pedestrians diverted along St. Marys Lane could be achieved by NR agreeing a programme of verge clearance and annual maintenance to achieve an uninterrupted safe width of verge for pedestrians to use along St. Mary's Lane between Havering footpath 179 and the junction of the B187 / B186 in lieu of a formal footway.
- 4.44 However I am deeply concerned with the comment that ST makes at paragraph 2.23.29, which is that:
- "The maintenance of the verges for road walking is the responsibility of the local authority."*
- 4.45 I understand this comment to mean that NR considers its responsibility for ensuring a safe and suitable diversion route ends once they have delivered a pedestrian to a public road. I further understand ST's statement at paragraph 2.23.29 to mean that NR considers that once pedestrians are delivered to the public highway, the risk of pedestrian / vehicle conflict is transferred from themselves to the highway authority notwithstanding that there is arguably a higher risk of conflict on the public highway than at the level crossing.
- 4.46 In this context, in the absence of a commitment from NR to enter into a programme of verge clearance and annual maintenance to enable pedestrians to safely follow NR's proposed diversion route along St. Mary's Lane or else to accept the independent safety auditor's recommendation for a footway, I would invite the Inspector to recommend that this proposed closure is rejected because the alternative pedestrian route is unsafe.
- 4.47 Turning to the remainder of the proposed diversion route, no reference is made in ST's evidence to the safety risk to pedestrians compelled to cross the B187 to reach Havering footpath 177.
- 4.48 At paragraph 2.23.22, ST agrees with the independent road safety auditor and myself (paragraph 4.77 of my evidence) regarding significant concerns over the safety of pedestrians crossing the B186 Warley Street on the overline bridge. However neither ST nor the auditor identify the risk that pedestrians reaching the junction of St. Mary's Lane and Warley Street are likely to be tempted to follow the significantly shorter route northwards which crosses the B186 Warley Street overline bridge rather than the diversion route which takes pedestrians westwards first before crossing the B187, travelling northwards and then eastwards to reach Warley Street north of the overline bridge.
- 4.49 In this context, even should NR agree to providing the verge improvements or footway described above, I would invite the Inspector to recommend that this proposed closure is rejected because the alternative pedestrian route is unsafe.

### Site HA3 – Manor Farm, Havering

- 4.50 Paragraph 2.51.1 of ST's evidence dismisses the use of this crossing. However the Order seeks the lawful closing of this crossing with an associated proposed diversion of the route. NR proposes that pedestrians would be diverted along Ockenden Road, crossing the Ockenden Road railway bridge in the carriageway. For the reasons I set out below for the HA4 (Eve's Havering) crossing closure, I would invite the Inspector to recommend that this proposed closure is rejected because the alternative pedestrian route is unsafe.

### Site HA4 – Eve's, Havering

4.51 ST states at paragraph 2.51.17 that:

*"The use of road walking has been mitigated as much as reasonably feasible by the introduction of field edge footpaths along Pea Lane and Ockenden Road."*

4.52 At paragraph 2.51.18 ST states:

*".....the hump back nature of the bridge does create a zone of reduced visibility for vehicles to pedestrians and vice versa. A length of approximately 15m carriageway walking is within the zone of limited visibility".*

4.53 For context, it takes a vehicle travelling at 40mph (the speed limit of Ockenden Road) less than one second to travel 15m. As I quote in paragraph 4.14 above, highway design guidance advises that the reaction time of a driver travelling at 60kph is 1.5 seconds. For a driver travelling at speeds above 60kph, the reaction time is 2 seconds. This means that a vehicle will already have travelled the 15m in the "zone of limited visibility" and hit the pedestrian before the driver has even started braking.

4.54 In this context, I would invite the Inspector to recommend that this proposed closure is rejected because the alternative pedestrian route is unsafe.

### **Site T05 – Howells Farm, Thurrock**

#### **Proposed Diversion**

4.55 NR's independent road safety auditor recommended that:

*"....a suitable footway [is] provided along Southend Road"; and*

*"...an additional section of footway is provided on the western side of High Road to the north of the railway, to remove the incomplete section of footway".*

4.56 I agree with both these recommendations of the independent road safety auditor setting out my own recommendations at paragraph 4.103 of my evidence. However I also consider that safety for pedestrians diverted along Southend Road could be achieved subject to NR agreeing to a financial contribution to the highway authority to undertake regular verge maintenance throughout the year to retain a good width of verge on the 900m of the B1420 that has no footway.

4.57 Having reviewed ST's evidence, there is no reference to the independent road safety auditor's recommendation. There is no explanation why the independent road safety auditor's recommendations have been ignored.

4.58 The design team's response (led by ST) to the independent road safety auditor's recommendations for High Road (page 36 of the RSA1 design team response) is:

*"Disagree – pedestrians currently use the verge to walk along this section of Southend Road and we are not proposing to change this part of their current journey." [sic]*

4.59 I firstly note that the design team response refers to Southend Road whereas the independent road safety auditor's recommendations refer to High Road. But more importantly the "current journey" of pedestrians using the level crossing is via the level crossing and not High Road. The design team response is therefore incorrect.

4.60 In the context of the failure of ST to even acknowledge the independent road safety auditor's recommendation and the confusion of the design team's response to the independent road safety auditor's recommendation, I would invite the Inspector to recommend that this proposed closure is rejected because the alternative pedestrian route is unsafe.

4.61 In the event that the Inspector should decide to recommend that this closure be allowed, I would invite the Inspector to recommend that:

- a. A financial contribution is made to the highway authority to undertake regular verge maintenance throughout the year to retain a good width of verge on the 900m of the B1420 that has no footway.
- b. A 1.2m wide footway is provided on the western side of High Road where it crosses the railway level crossing.
- c. As an alternative to the mitigation I propose at 4.59a and in accordance with the recommendations of the independent road safety auditor, a bound surfacing material is located in the verge to create a surfaced footway on the 900m of the B1420 that has no footway.

#### **Alternative Diversion**

- 4.62 Since the submission of their Statement of Case, NR has provided a further proposed diversion route. This revised route is provided at my **Appendix B**.
- 4.63 I have not had the opportunity to audit this alternative route. I also note that ST confirms at paragraph 2.54.16 that a road safety audit has not yet been undertaken on the diversion route provided at my **Appendix B**.
- 4.64 On the basis of ST's acknowledgement of this, should the Inspector be minded to recommend that this closure be allowed subject to the provision of this alternative diversion route, I would invite the Inspector to defer a decision on this proposed closure until an RSA1 has been prepared and submitted for scrutiny with the RSA1 prepared with the benefit of traffic volume and speed data, collision data and NMU data rather than leaving assessment of this data for the stage 2 RSA.

## 5.0 Summary and Conclusions

- 5.1 I advise the Ramblers Association on matters of highway design and safety with respect to the Proposed Network Rail (Essex and Others Level Crossing Reduction) Order (hereafter referred to as "the Order") which seeks to close a number of level crossings on footpaths within the Essex area and replace them with alternative pedestrian routes. The Order is made by Network Rail (NR).
- 5.2 I have prepared this rebuttal to address the main points of dispute within Susan Tilbrook's (ST) proof of evidence (reference NR32/1).
- 5.3 I have not provided comment on every paragraph of ST's evidence or other NR evidence. Any lack of comment should not be taken as my agreement with the views expressed.
- 5.4 My review of ST's evidence has not led me to change the conclusions set out in Section 5 of my evidence other than with regards to closure HA03. A summary of my conclusions is provided below. For each diverted route I recommend that clear signing is provided along the route.

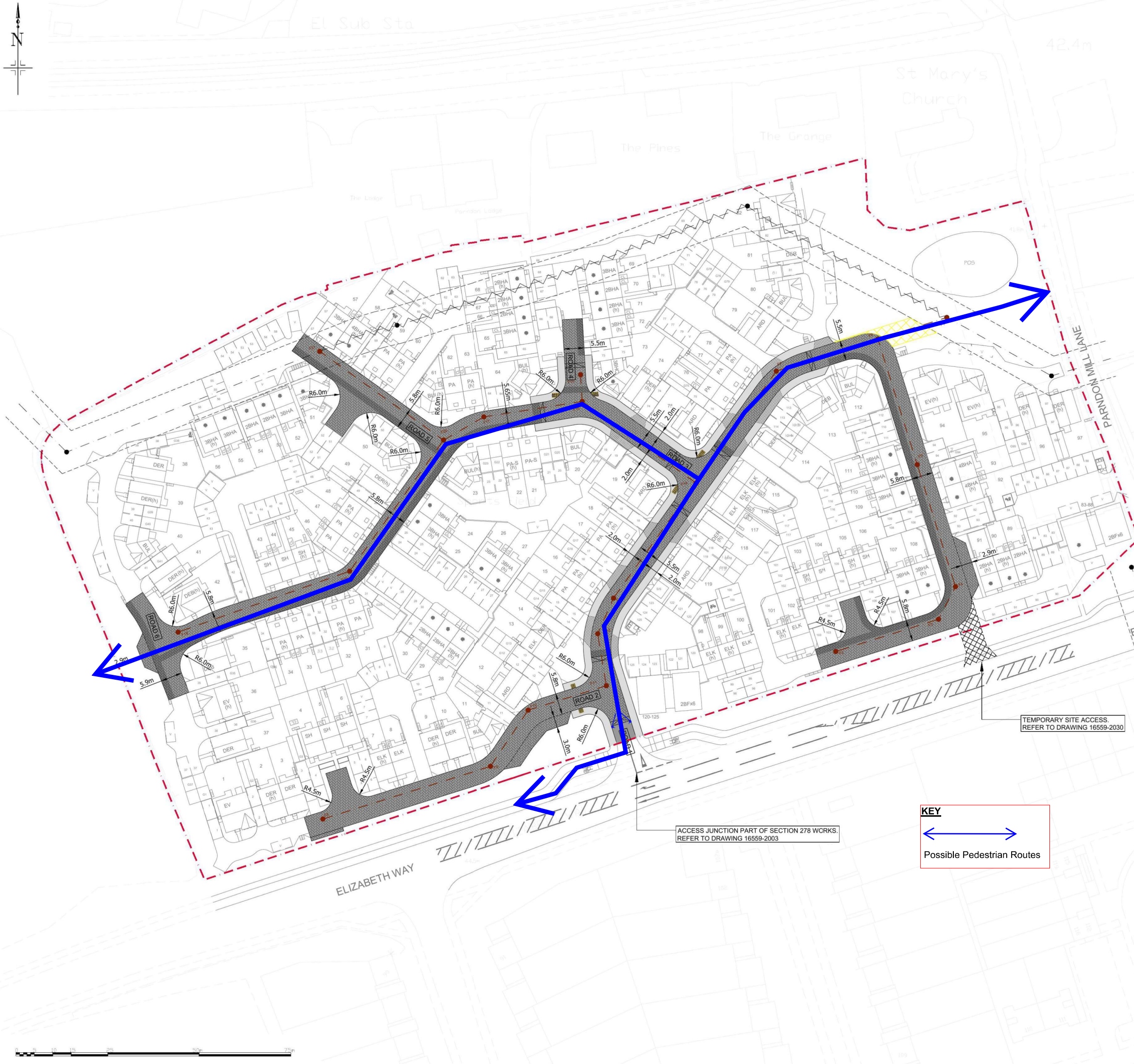
Level Crossing Reference	Recommendation	Reason / Modifications
Site E04 - Parndon Mill	No objection subject to modifications.	Diversion of footpath through Harlow rugby club to join Parndon Mill Lane adjacent to St. Mary the Virgin church. This removes the section of Parndon Mill Lane on the route which is considered to pose a risk to pedestrians walking in the carriageway.
Site E10 - Dixies, Newport	No objection subject to modifications.	Crossing facilities (e.g central refuge island or pelican crossing) provided on Bury Water Lane to assist diverted pedestrians to cross safely.  Seek expert advice on child safeguarding issues and, if necessary, secure a segregated section of footpath on footpath EX/41/4 where it passes close to or within the school grounds so that secure fencing can be erected between the public footpath and the school.
Site E54 - Bures	OBJECTION	Severe visibility restriction at the western side of the railway bridge combined with the very limited scope to provide continuous segregated pedestrian facilities along the main Lamarsh Hill / Station Hill Road.
Site E48 - Wheatsheaf, Wrabness	OBJECTION	Width of Station Road and speed of traffic combined with lack of continuous verge for pedestrians to utilise.
Site E42 - Sand Pit, Elmstead	NR has withdrawn plans to close this level crossing	
Site E38 - Battlesbridge, Rettendon	No objection  This route would be unsafe if the highway verge is lost.	
Site T01 - No 131, Thurrock	No objection	
Site E29 - Brown and Tawse, West Homdon	No objection subject to modifications.	Narrowing of carriageway over the railway bridge with the introduction of priority working for traffic.  Provision of protected lane on the railway bridge for pedestrians.

Level Crossing Reference	Recommendation	Reason / Modifications
Site E28 – Whipps Farmers, Brentwood	OBJECTION	The proposed diversion adds an unreasonable additional distance for pedestrians which is expected to result in many pedestrians ignoring the diversion route and following the more dangerous route along the B186.
Site HA3 – Manor Farm, Havering	OBJECTION	The railway bridge on Ockenden Road is humped severely reducing visibility to oncoming traffic. It is narrow with both approaches having warning signs warning motorists of the risk of oncoming vehicles being in the middle of the road
Site HA4 – Eve's, Havering	OBJECTION	The railway bridge on Ockenden Road is humped severely reducing visibility to oncoming traffic. It is narrow with both approaches having warning signs warning motorists of the risk of oncoming vehicles being in the middle of the road
Site TO5 – Howells Farm, Thurrock	No objection subject to modifications.  This route would be unsafe if the highway verge is lost.	Financial contribution to the highway authority to undertake regular verge maintenance throughout the year to retain a good width of verge on the 900m of the B1420 that has no footway.  1.2m wide footway is provided on the western side of High Road where it crosses the railway level crossing.  Consideration given to placing a bound surfacing material in the verge to create a surfaced footway on the 900m of the B1420 that has no footway.



## Appendix A

Proposed Development Layout: E04 Parndon Mill Lane



NOTES

1. CONTRACTORS MUST CHECK ALL DIMENSIONS ON SITE. ONLY FIGURED DIMENSIONS ARE TO BE WORKED FROM. DISCREPANCIES MUST BE REPORTED TO THE ARCHITECT OR ENGINEER BEFORE PROCEEDING. © THIS DRAWING IS COPYRIGHT.
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3. UNTIL TECHNICAL APPROVAL HAS BEEN OBTAINED FROM THE RELEVANT AUTHORITIES, ALL DRAWINGS ARE ISSUED AS PRELIMINARY AND NOT FOR CONSTRUCTION. SHOULD THE CONTRACTOR COMMENCE SITE WORK PRIOR TO APPROVAL BEING GIVEN IT IS ENTIRELY AT THEIR OWN RISK.
4. WOODS HARDWICK CANNOT ACCEPT LIABILITY FOR ANY DISCREPANCIES IN TERMS OF COORDINATES OR ANY OTHER INFORMATION DECIPHERED FROM DWG'S.
5. THE EXACT LOCATION AND LEVEL OF ALL EXISTING SEWERS, DRAINS AND SERVICES TO BE CONFIRMED ON SITE PRIOR TO THE COMMENCEMENT OF ANY WORKS.
6. ALL ADOPTABLE DRAINAGE WORKS TO BE CONSTRUCTED IN ACCORDANCE WITH SEWERS FOR ADOPTION 7TH EDITION.

SAFETY HEALTH AND ENVIRONMENTAL

IN ADDITION TO THE HAZARDS, RISKS NORMALLY ASSOCIATED WITH THE TYPE OF WORK DETAILED ON THIS DRAWING, NOTE THE FOLLOWING SIGNIFICANT RISKS AND INFORMATION.

- CONSTRUCTION:
1. DEEP EXCAVATIONS REQUIRED FOR FOUL SEWERS.
  2. CLOSE PROXIMITY TO STATUTORY UTILITY SERVICES. REFER TO MK SURVEYS UTILITY SURVEY, DRAWING '23541-1' DATED MARCH 2017.
- FOR INFORMATION RELATING TO END USE, MAINTENANCE, DEMOLITION, SEE THE HEALTH AND SAFETY FILE.

IT IS ASSUMED THAT ALL WORKS WILL BE CARRIED OUT BY A COMPETENT CONTRACTOR, WHERE APPROPRIATE, TO AN APPROVED METHOD STATEMENT.

KEY

- SITE BOUNDARY
- ADOPTABLE ASPHALT CARRIAGEWAY
- ADOPTABLE ASPHALT FOOTWAY
- ADOPTABLE PERMEABLE BLOCK PAVED CARRIAGEWAY
- 1.8m SERVICES CORRIDOR (IMPERMEABLE) BLOCK PAVED CARRIAGEWAY
- VEHICLE CROSSING
- RAMP
- TACTILE PAVING
- PROPOSED STREET LIGHTING COLUMN (LOCATION TBC)
- EXISTING FOUL WATER SEWER
- EXISTING FOUL WATER SEWER TO BE GROUTED UP & ABANDONED
- PROPOSED ADOPTABLE FOUL WATER SEWER
- PROPOSED ADOPTABLE HIGHWAY AUTHORITY ROAD GULLY (DIRECT CONNECTION TO PERMEABLE SUB-BASE)
- PROPOSED SEWER EASEMENT

KEY

Possible Pedestrian Routes

REVISION	DESCRIPTION	DRAWN	CHECKED	DATE
PRELIMINARY	INFORMATION	TENDER	CONSTRUCTION	AS BUILT

**WOODS HARDWICK**  
ARCHITECTS, ENGINEERS AND DEVELOPMENT CONSULTANTS

TITLE: RAM GORSE  
HARLOW  
DETAILS: SECTION 38  
GENERAL ARRANGEMENT

SCALE: 1:500 @ A1 DATE: MARCH 2017 DRAWN: PK CHK: MDF

Please consider the environment before printing this drawing  
Filepath: F:\Engineer\16559\01-Drawings

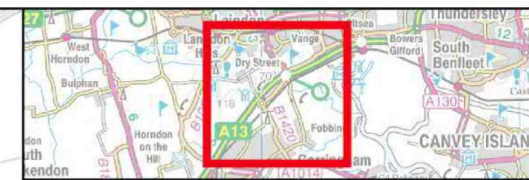
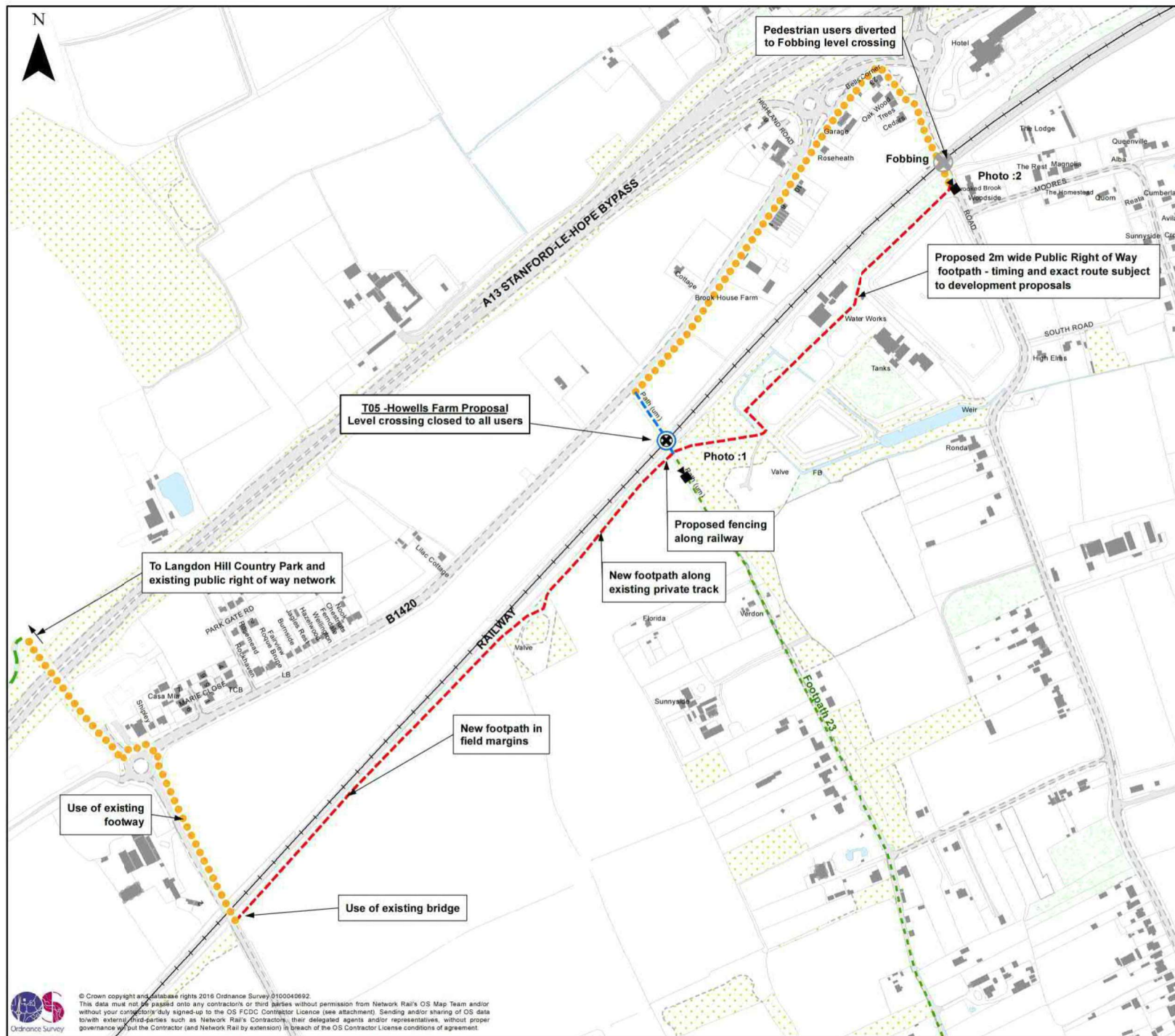
15-17 GOLDINGTON ROAD  
BEDFORD, MK40 3NH  
BIRMINGHAM, B24 9FE  
UNITED KINGDOM

16559-500

## **Appendix B**

Closure T05 alternative proposed diversion route





- Level Crossings**
- Level crossing being discussed
  - Other level crossing in the project
  - Other level crossing not in the project

- Right of Way / Other Route Type**
- Footpath
  - Bridleway
  - Restricted byway
  - Byway open to all traffic
  - Highway (shown where used as part of a diversion)
  - Private Road / Track (shown where used as part of a diversion route)
- The line styles above indicate the type of right of way or other route proposed.

- Right of Way / Other Route Status**
- No Change and not part of diversion route
  - Use of Existing right of way for diversion route
  - Change of Status to right of way
  - Closure of existing right of way
  - Creation of new right of way
- The colours below indicate the nature of the proposal.

- Photographs**
- Photograph Location (with no. - see Summary Sheet for details)

**Anglia Level Crossing Reduction Strategy**  
**Round 2 Public Consultation Proposal**

T05 - Howells Farm Thurrock Unitary Authority Thurrock (B)						
P1	16/08/2016	For Information	WC	DW	SJT	JAS
Rev	Date	Description	Dwn	E Chk	Ch'k'd	App'd
Scale at A3 1:5,000		Drawing No. MMD-367516-T05-GEN-003				

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