

By Email : [REDACTED]

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6th July 2018

Dear [REDACTED]

### **Information request**

**Reference number:** FOI2018/00783

Thank you for your email of 10th June 2018, in which you requested the following information:

*'There is a rail foot crossing, just outside Shepperton, between Shepperton and Upper Halliford. Under the freedom of Information Act, could you please let me know:*

- 1) When last this foot crossing was inspected?*
- 2) How often it is inspected?*
- 3) If any safety assessment has been conducted for this crossing? If so, can I have a copy?*
- 4) If any usage assessment/study has been conducted for this crossing? If so, can I have a copy?*
- 5) Is there any plans for the closure of this foot crossing? If so, by when?*
- 6) Are there any plans to convert it to a foot bridge? If so, by when?'*

I have processed your request under the terms of the Freedom of Information Act 2000 (FOIA). I confirm we hold the information you have requested and I will answer each of your questions in turn.

1) When last this foot crossing was inspected?

The crossing had an asset inspection on the 7th March 2018.

2) How often it is inspected?

The crossing is inspected every six months.

3) If any safety assessment has been conducted for this crossing? If so, can I have a copy?

Please find attached our latest risk assessment for this crossing labelled "*Bugle-FPW-2356-2017/07/12.pdf*"

I have withheld the names of members of staff from the document under section 40(2) of the FOIA. This exemption allows us to withhold information in circumstances where its disclosure would breach the data protection principles set out at s.35 of the Data Protection Act 2018 and Article 5 of the General Data Protection Regulations. In this instance disclosure would breach the first principle that mandates that data must be processed fairly and lawfully. Here staff members' names, phone numbers and email addresses would clearly make them identifiable and since they would have had no expectation that their personal details would be publicly disclosed through the FOIA, I am satisfied that to do so would be an unfair processing of their personal information.

4) If any usage assessment/study has been conducted for this crossing? If so, can I have a copy?

The usage assessment is contained within the risk assessment we are providing to you in response to question four.

5) Is there any plans for the closure of this foot crossing? If so, by when?

There are no plans to close this foot crossing at this time but the option of closure has been discussed and is contained within the attached risk assessment.

6) Are there any plans to convert it to a foot bridge? If so, by when?'

We have no plans to convert this crossing to a footbridge, however this possibility has been discussed and the details of this are again contained within the attached risk assessment.

I hope that the information and explanation I have provided is useful. If you have any enquiries about this response, please contact me in the first instance at FOI@networkrail.co.uk or on 01908 782405. Details of your appeal rights are below.

Please remember to quote the reference number at the top of this letter in all future communications.

Yours sincerely

**Joanne West**  
**Senior Information Officer**

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### **Appeal Rights**

If you are unhappy with the way your request has been handled and wish to make a complaint or request a review of our decision, please write to the Head of FOI at Network Rail, Freedom of Information, The Quadrant, Elder Gate, Milton Keynes, MK9 1EN, or by email at [foi@networkrail.co.uk](mailto:foi@networkrail.co.uk). Your request must be submitted within 40 working days of receipt of this letter. If you are not content with the outcome of the internal review, you have the right to apply directly to the Information Commissioner for a decision. The Information Commissioner can be contacted at:

Information Commissioner's Office  
Wycliffe House  
Water Lane  
Wilmslow  
Cheshire SK9 5AF  
**Web:** [www.networkrail.co.uk/foi](http://www.networkrail.co.uk/foi)



# Level Crossing Risk Assessment

## BUGLE FOOTPATH CROSSING



Date assessment compiled 18<sup>th</sup> July 2017

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## INTRODUCTION

This document provides the necessary supporting safety information to a decision making process for Bugle Footpath Crossing, leading to recommendations as to the most suitable level crossing option that reduces the risk to as low as reasonably practicable.

### Background

Bugle is a footpath crossing located in Upper Halliford which is a short walk from a residential area in close proximity. The crossing is occasionally used by dog walkers, ramblers and visitors to the fishing lakes. Whistle boards are in situ at the crossing. In addition there is a step up to each side of the crossing; signs warning of electrified railway, trespass signs and signs warning pedestrians to stop, look and listen and to beware of trains.

## DESCRIPTION OF THE SITE

### 2.1 Current Level Crossing Details

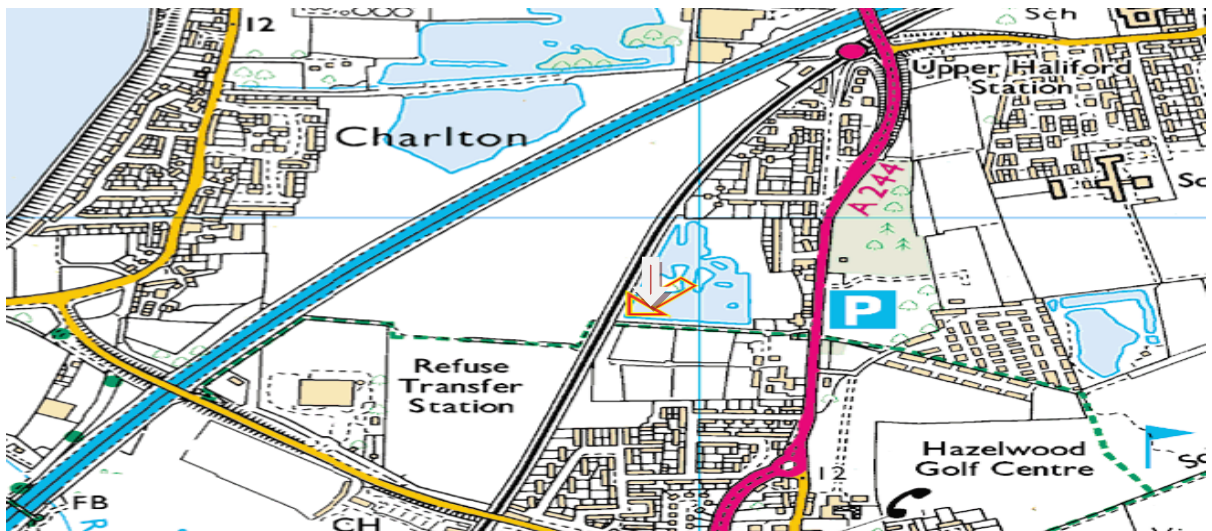
<b>Level Crossing Name</b>	<b>Bugle</b>
Level Crossing Type	Footpath Crossing with Gates
Strategic Route	London Waterloo to Shepperton Line
Engineers Line Reference (ELR)	NMS2
Mileage	17miles 14 chains
OS Grid Reference	TQ088684
Local Authority	Spelthorne Borough Council
Supervising Signal box	Feltham
Number of running lines	2
Maximum Permissible Line Speed	60mph

## 2.2 Environment

### Aerial view of the location of the crossing



### Ordnance survey map outline



LOR	Seq.	Line of Route Description	ELR	Route	Last Updated					
SW190	005	New Maiden to Shepperton	NMS2	Wessex	21/09/2015					
Location	Mileage M Ch	Running lines & speed restrictions	Signalling & Remarks							
<b>SUNBURY</b>	16 84		<table border="1"> <tr> <td>TCB</td> <td>Feltham SB (F)</td> <td rowspan="2">GSM-R</td> </tr> <tr> <td>RA8</td> <td>DC: Raynes Park</td> </tr> </table>			TCB	Feltham SB (F)	GSM-R	RA8	DC: Raynes Park
TCB	Feltham SB (F)		GSM-R							
RA8	DC: Raynes Park									
<b>UPPER HALLIFORD</b>	17 34									
<b>SHEPPERTON</b>	18 73									

### 2.3 Sighting

Network Rail standards dictate that a speed of 1.189 metres per second should be used to calculate a pedestrian's traverse time, where the surface is at or near to rail level. The calculated time in traversing the crossing should be increased by 50% to take account of foreseeable circumstances such as impaired mobility of users, numbers of prams and bicycles. The census at Bugle has not identified a high number of vulnerable users. If such user were to be later identified then the required sighting would remain compliant.

The recommended decision point for a footpath crossing stands at 2m and this gives a crossing traverse length of 9m. With a line speed of 60mph this provides a traverse



time of 7.57 seconds. The sighting distances on the date of assessment are as follows:

	<b>Required Sighting for 7.57s traverse time</b>	<b>Measured Sighting</b>
<b>Up side looking towards up direction train approach</b>	203m	490m
<b>Up side looking towards down direction train approach</b>	203m	402m
<b>Down side looking towards up direction train approach</b>	203m	492m
<b>Down side looking towards down direction train approach</b>	203m	370m

Continual vegetation clearance on the curve in the up direction has improved sighting. Whistle-boards have also been moved to the correct distances in line with national reviews although their necessity remains questionable and there is no historical documentation explaining their installation.

Drivers do not sound the horns at the whistle boards during the quiet period\*. A prior census carried out showed that the crossing was used between 0600hrs & 0700hrs.

\* The night time quiet period refers to a blanket ban on the sounding of train horns during the night, i.e. 2300 to 0600 hours, unless a person is seen at the level crossing. This means that, should the driver not use the horn, the protection provided by the whistle boards is reduced during this time and the location of the approaching train is purely by sight. This decision was based on the societal harm that train horns sounding through the night caused versus the risk at crossings.

**East side looking south (Down side up train approach)**



**West Side looking North (Upside down train approach)**



**East side looking North (Down side down train approach)**



**West Side looking south (Upside up train approach)**



## **2.4 Crossing Usage**

There have been two censuses conducted at the crossing in recent years. The prior census was a 9 day census conducted under the Feltham Re-signalling project in 2013. During those 9 days, the busiest day, with 10 pedestrians recorded, was Tuesday 15 January 2013. (6 movements eastbound and 4 movements westbound). Over the census period 51 pedestrians used the crossing (30 eastbound, 21 westbound).

The second camera census was conducted in 2017 for a week prior to the assessment and which averages out as 6 users a day. The findings were as follows: Day 1-2 users , Day 2 -8 Users , Day 3 -14 users (One event was 5 guys at once), Day 4- 8 users (1 user with dog on lead and 1 cyclist carrying a bike but didn't seem to be taking their time), Day 5 -9users (1 dog walker on lead 1 child but accompanied) , Day 6- 1 user but multiple rail staff not counted and Day 7- 3 users (1 dog walker on lead).

## **2.5 Rail Service**

TRUST data in 2017 shows that 91 trains use the crossing on a daily basis. The trains are generally 8-car class 455 EMUs running to a half-hourly frequency between London Waterloo and Shepperton via Wimbledon. Additional peak services operate between London Waterloo and Shepperton via Richmond and there have been no increases since. Other classes of EMU are also used on occasion. There are no freight services on this line and, as a dead-end branch; it is not used for diversions.

## **2.6 Future developments**

There are no known housing development plans in this area which may have an impact on the crossing. However, Bugle may form part of Crossrail 2 which is still at the feasibility stage of that program.

## 2.7 Incident history since 2006 (Source SMIS)

There was one documented event at the crossing in 2017 listed in the table below. In 2015 there was an attempted suicide recorded at the crossing as well as a near miss and emergency brake application. Since 2004, there have been 5 documented events including a suicide, trespass, anti-social behaviour and one other near miss.

Date	Short Description
25 Feb 17	Train driver reported 2 youths walked out in front of his train at Bugle foot crossing

## 2.8 ALCRM (All Level Crossing Risk Model) Scores

The current risk assessment score on ALCRM is C6\* with a corresponding FWI scoring of 2.37E-04. This classifies the crossing as medium risk. The following key risk drivers were identified by the ALCRM toolset and contributed to the risk score as follows:

- Frequent trains

\* The ALCRM (All Level Crossing Risk Model) provides a prediction of risk which it classifies in the following ways:

- Individual risk of fatality (identified by a letter A (high) to M (low)), which relates to the risk of death for an individual using the crossing on a frequent basis (500 times per year).
- Collective risk (identified by a number 1(high) to 13 (low)), which relates to the total risk generated by the crossing. This takes into account the overall risk of death and injury for crossing users, train crew and passengers.

Note: The ALCRM tool can give a rather limited output about hazards around residual risk or misuse. It is not possible to use ALCRM to properly assess the risk from a wide range of hazards.

## OPTION ASSESSMENT

### 3.1 Closure with footbridge and diversion

Prior to this assessment this option was proposed to the Wessex Closures Team but was rejected at this time subject to risk based funding Route wide. A Cost Benefit Analysis (CBA) for this crossing does not justify funding for a bridge and a diversionary route at the location would not be viable as it would exceed permissible alternative parameters. Whilst it has been optioned for this assessment for documentary purposes, it may be viable to revisit this in next Control Period (CP6) or, in the event that Crossrail 2 project considers this.

### 3.2 Miniature Stop Lights (MSL)

MSL offer the highest level of protection at this location. However, as there is a reliance on users obeying the lights and signage, experience at other crossings indicates that we cannot be confident users will obey these safety indications therefore if these are installed it must be accepted that they do not fully control the risk. These were considered as part of the Feltham Re-signalling project but not deemed a site of priority therefore funding was not agreed. It has been optioned for this assessment and does not pass a CBA to produce a suitable business case.

#### 4 COST BENEFIT ANALYSIS

Option	Term <sup>1</sup>	ALCRM risk score	ALCRM FWI	Safety Benefit	Cost	Benefit Cost Ratio	Status	Comments
Closure via bridge	Long Term	M13	0	2.37E-04	£500k	0.05	REJECTED	.Safety and business benefit does not justify the cost of enhancement
MSL - High costs	Long Term	D7	9.97E-05	1.37E-04	£320K	0.01	REJECTED	Safety and business benefit does not justify the cost of enhancement

#### 5 CONCLUSION AND RECOMMENDATION

When carrying out a level crossing risk assessment, in line with Network Rail and Office of Rail and Road (ORR) policy<sup>1</sup>, one must look to eliminate the hazard through the hierarchy of risk controls.

Risk controls should, where practicable, be achieved through the elimination of level crossings in favour of bridges, underpasses or diversions.

Network Rail is subject to the requirements of the Health and Safety at Work Act etc 1974 to reduce risk 'so far as is reasonably practicable'. In simple terms this means that the cost, time and effort required in providing a specific risk reduction measure needs to be commensurate with the safety benefit that will be obtained as a result of its implementation.

<sup>1</sup> Level Crossings: A guide for managers, designers and operators, Railway Safety Publication 7, Office of Rail Regulation, December 2011

Network Rail is a public sector body and its health and safety management system (part of its safety authorisation issued by the ORR) sets out the company's approach towards prioritisation of safety expenditure.

In November 2013 Network Rail were questioned in Parliament by the Transport Select Committee over the safety of level crossings and were challenged to close crossings wherever feasible. In its subsequent published report<sup>2</sup> the Select Committee recommended that the Office of Rail Regulation adopt an explicit target of zero fatalities at level crossings from 2020.

The Select Committee Report also referred to the Law Commission's review on Level Crossings (September 2013)<sup>3</sup> which recognised that decisions about level crossings involve striking a balance between the convenience to communities in being able to cross a railway and public safety.

Options to improve safety at Bugle are limited. Closure via diversion or footbridge has been ruled out at this stage based on available funding and hierarchy of risk. MSL were also considered at the crossing by the Feltham Re-signalling project but also discounted. Both options do not pass the Cost Benefit Analysis (CBA) threshold as the cost is disproportionate to the risk reduction achieved.

In terms of managing risk Bugle does not have an adverse historical record nor is it a notable crossing for deliberate misuse. Sighting is good and whilst standard vegetation clearance is a continual requirement that is managed, it is the conclusion of this assessment that the risk at this crossing is being managed as far as is reasonable practicable. Therefore no further action other than routine inspection and monitoring is required until the next risk review, or unless changes in the risk profile are identified.

## 6 APPROVALS

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<sup>2</sup> House of Commons Transport Committee : Safety at level crossings: March 2014

<sup>3</sup> Level Crossings, Law Commission, September 2013

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Approved By: [REDACTED] (RLCM)	Signature: Held On File
	Job Title: Route Level Crossing Manager