10.0

Other Level Crossing and Road Rail Interface Issues

10.0 Introduction

In this chapter the author considers some of the issues noted whilst visiting the level crossings in connection with this dissertation; details of these level crossings can be found in Appendix A. Further illustrations showing some of the problems can be found in Appendix K.

10.1 The Problems

At South Scarle AHB LC, in rural Lincolnshire, the author discovered a classic level crossing problem. Looking in a north-westerly direction, the level crossing has excellent signposting, and the barriers and road traffic lights are visible from a fair distance. However, when looking in a south-easterly direction, from the other side of the level crossing, it becomes a highly dangerous interface to the railway, with the motorist being 'blinded' by the mid-morning sun. The signposts, road signals and level crossing have blended into the vegetation in the surrounding area.

Figure 10.1

South Scarle AHB LC, Lincolnshire, looking south-east. If your eyesight is good you may just make out the red and white backboard chequering of the road signals facing the motorist!

At Winthorpe AHB LC in Nottinghamshire, the local milkman was noted delivering to the house adjacent to the level crossing, and parking illegally on double white lines, on the exit side of the level crossing. This crossing has a noticeable hump in the road and a motorist travelling towards the parked milk float would be placed in a very dangerous position if a vehicle is proceeding in the other direction, as he reaches the crown of the level crossing and finds the exit blocked.

Many level crossings were seen with excessive vegetation obstructing signage and road traffic signals. At several locations, the primary road traffic signal was completely obscured to the approaching driver as a result of the hedges on the left hand side of the road. If a high sided vehicle is passing at the right moment the secondary signal will also be obscured putting the approaching driver in an unfortunate and dangerous position. (see figure 10.2).

Many level crossings were seen with the old style 'white' backboards, rather than the current red and white chequered type shown in SI 1519. Some ten level crossings in Lincolnshire were noted with the now defunct neon ATC signs. Such signs are not in the current edition of the Highway Code and cannot be supported as spare parts are unobtainable.

Quarrington AHB LC in Lincolnshire has wicket gates. The wicket gates should be self-closing, but were not; thus the 'blocked path' effect was lost. In addition, a mental hospital entrance/exit was adjacent to the level crossing highlighting the care that needs to taken in managing the risks of vulnerable patients who possibly will not understand the significance of the wicket gate or level crossing.

At Swinedyke MSLUWG LC in Lincolnshire, the author found the gates left open by the previous user, thus endangering future users, particularly youngsters who may not fully appreciate the dangers. Accommodation and Occupation crossings cause railways regular safety scares with such behaviour and farm vehicles etc. The fine for leaving gates open is £50 on NIR. Such penalties should be far higher and rigorously enforced by the courts.

Figure 10.2

Willoughby Road AHB LC (top) and Walesby AHB LC (bottom) both Lincolnshire; In both cases the primary road signal is totally obscured to the approaching driver as a result of the hedges on the left hand side of the road. If a high sided vehicle is passing at the right moment the secondary signal will also be obscured putting the approaching driver in an unfortunate and dangerous position.

Some considerable confusion with road traffic signs was seen at various level crossings. At Harbour MCB LC, in Folkestone, two conflicting instructions were seen on the same post; 'Stop when lights show' and 'Give Way'. Which does the motorist obey first ? The 'Give Way' sign actually referred to a white line adjacent to the post which has been worn away by traffic. At Carnaby AHB LC in East Yorkshire, a curiously placed 'Motorcycles Prohibited' sign could apply to either an adjacent footpath or the one over the level crossing. Many versions of the 'Risk of Grounding' sign were discovered.

Why do we not have a common range of prohibition signs *all* with 45^0 red stripes ? We go to great lengths to ensure that railway signals do not cause confusion but there are many instances of road signs and signals where no such consideration appears to have been given.

The Lockington Inquiry report recommended closure of two of the four LCs in the vicinity; they are all still operational and Scorborough has been recently upgraded to an AHB LC. When are recommendations going to be acted upon for everyone's benefit ?

At Callerton AOCL LC on the TMR, a central reservation has been constructed to prevent overtaking. Whilst reducing the risks at the level crossing, construction costs increase dramatically. At Fawdon AOCL LC, also on the TMR, the side turning is obviously causing problems for articulated lorries. The lorry driver is unlikely to hear the yodalarms nor be able to see the road signals when undertaking such a manoeuvre (see figure K.6). Side turnings often need additional road traffic signals and signage (see figure 10.4).

At Rowland Hall AHB LC, East Yorks, an additional exclamation mark titled 'Blind Summit' had been installed to give a further warning of the approaching level crossing with a particularly severe 'hump back bridge' effect. The author believes that most motorists would not understand the term 'Blind Summit'. At Star AHB LC, Sussex, additional white stripes have been painted on the fencing at driver eye height to emphasise the road boundary, presumably, in an attempt to stop people turning left onto to track. (See the comments in Chapter 4 relating to Upper Denton LC in Cumbria).

Figure 10.3

Endon AOCL LC, Staffordshire; the railway line is shown in Quail as being 'not in regular use'. If the line is still open the LC should be maintained properly and not allowed to deteriorate. The public will not treat the LC seriously when left in such a state. If the railway has been mothballed, then the level crossing should also be, so that the public does not treat it with complacency.

Figure 10.4

Kilmakee AHB LC, Co. Antrim; The level crossing and railway have been out of use for a considerable time; new train services require additional warning signs.

On the Cologne Tramway system in Germany it was noted that additional small barriers have been added to a half barrier arrangement, to stop pedestrians entering the crossing on the opposite side of the road from the half barrier.

One anomaly in the UK Highway Code apparent in rural areas, is the lack of any barrier to prevent pedestrians walking onto the LC if they are obeying the Highway Code and walking facing oncoming traffic; if the person is deaf or has a sight problem they may not hear yodalarm or see the road lights and could thus walk into the side of the approaching train.

Vandals are a problem in a lot of places and are a sad reflection on life in the '90s. In many places signs were seen with graffiti on, road signal lenses smashed, signs turned away from the road and etc. In Northern Ireland, special measures are needed and netting cages are fitted to many level crossing road signals. At Endon AOCL LC in Staffordshire the railway is 'not in regular use' according to Quail (see figures 10.3 & 10.4). This would suggest that the railway is officially open and temporarily 'mothballed'. If this is the case the level crossing should be maintained or the public will fail to respect the level crossing. A similar situation was noted at Steeple Claydon AOCL LC in Buckinghamshire.

We now have trams running in several places in the UK. The author fails to understand why a Sheffield tram on segregated track weighing 53 tons and capable of 50mph needs less protection, e.g. conventional traffic lights, no fencing, than a single car DMU on a rural railway weighing 35 tons and travelling at 40-50mph (although capable of 75mph) which requires an AHB, AOCL or ABCL and with traffic levels in some places minute compared to that in Sheffield. It appears to be another legislative inconsistency. It has, however, to be stated that the tram has substantially better braking system fitted.

The risk of grounding on a level crossing has always been assumed to be a problem that would be caused by long low loader vehicles. Much evidence was noted of damage to the road surface and level crossing surfaces and the author believes that much of this damage may be being caused by modern cars that have low ground clearance and

Figure 10.5

Killagan AHB LC, NIR, County Antrim (top) and Dymchurch West AOCL, RHDR, Kent (bottom); Side roads are always a problem to the level crossing designer and cause additional dangers to the railway; The farm track at Killagan may only be used several times a year, but the traffic is crossing the railway as evidenced by the mud trails. Note full size road traffic signal;
The RHDR has installed a single additional red flashing light to warn those in the side entrance, a novel method of advising those users.

Figure 10.6

Birley Lane (top) and White End Lane (bottom); Sheffield Supertram.

components. Many more personal vehicles are towing trailers and caravans these days, and many can been seen with incorrectly adjusted rear suspensions and poor quality couplings between the vehicle and trailer. The author believes that a vehicle and trailer in such a condition could easily deposit the trailer in the middle of the level crossing, should some low placed fitting become jammed into the crossing or road surface.

Sheffield Supertram has discovered a new and worrying problem, which is likely to become more commonplace as tramways and LRV systems are reintroduced. They have had a number of accidents where motorists have ended up on the segregated track, presumably caused by motorists 'tailgating' the tram and following the rails instead of the white lines; note the additional signs and road markings to give further warning to those concerned (See Figure 10.6).

10.2 Conclusion

If the foregoing comments and illustrations have not yet bought home the difficulties and dangers the railway faces from level crossings, the following illustrations will do so. The first illustration shows careless driving in action! The photograph is taken from video camera footage recorded from cameras mounted at the roadside at Umbra level crossing in County Londonderry, Northern Ireland. At the time, 1990, the level crossing was an AOCL. It has since been converted to an AHB. The second picture is reproduced by permission of Northern Ireland Railways and shows the level crossing during the sequence of operation at about 27 seconds into the cycle. The bus driver was sacked. The second shows the aftermath of the accident at Lockington and shows the results of careless driving.

Fractions of a second saved both the railway and bus company from a major disaster. Others are not so lucky; a recent level crossing accident on an open LC, between a bus and train in Lucknow, India, claimed 37 lives[178] and the USA suffered one of its worst LC accidents on the March 15th 1999, with eleven fatalities and 125 serious injuries when the Amtrak *City of New Orleans* train hit a lorry carrying steel bars at 79 mph at Bourbonnais, Illinois[179]. Level crossings should be abolished with all haste.

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[178] Evening Standard, 28.4.99

Figure 10.7

Umbra AOCL LC, NIR;

27 seconds into sequence, note red lights are clearly working.

Figure 10.8

Lockington, AOCR LC, East Yorkshire, 26.7.86.

The results of the collision with a small van, seen in foreground. The leading carriage of the train is facing the opposite direction to the way it was travelling, e.g. away from the photographer.

Photo: The Press Agency (Yorkshire) Ltd.