

# WIVENHOE TOWN COUNCIL

## Closing address to the Essex Level Crossings Order Inquiry

Written by Peter Kay January 2019

Small print sections will not be read out

### INTRODUCTION

The whole objection and inquiry process has been frustrated throughout by the applicants refusal to present any 'case' for the closure of this or any other individual crossing.

This attitude was already made clear at the first consultation exercise when the comments made showed that they were not (as the public had innocently assumed would be the case) interested in discussing the facts as to whether or not each crossing needed to be closed, but only willing to listen to views about the alternative routes \*\*.

\*\* When I said in my proof that people had been upset by the 'this will happen anyway' attitude shown, Ms Lean took umbrage – only to be followed by Mr Kenning immediately confirming that this was indeed the NR view - 'We were consulting on the alternative route options we were putting forward, we were not consulting on whether to leave the crossing open or shut it!.

The arrival of the NR 'Statement of Case' then showed that, bulky as it was, it did not incorporate any 'case' for the closure of any of the individual crossings, but was largely comprised of generalities. Originally inexplicable, this was later revealed to be based on a NR view that general comments about the actual problems experienced at some/many crossings at large were deemed by them to constitute an argument for the closure of *any* individual crossing, irrespective of whether it actually shared any similar problematic characteristics!

In the absence of any hard info on individual crossings prior to the receipt of the NR witnesses' proofs just before the inquiry began, those objectors seeking to challenge closures in detail were forced to prepare their own proofs aiming at an unrevealed target. It was fortunate that we had engaged in some email correspondence with *other* NR officers since 2014. When the inquiry began in September 2017, it was still not really clear whether NR were going to participate properly in it on matters other than alternative routes.

Not until examination and cross-examination in October 2018 did some of NR's real 'rationale' in proposing individual closures become fully clear. On top of that, we in Wivenhoe have had the special problem over the intended High St works.

*The late acquisition of some of the facts has resulted in this closing speech having to contain rather more detail than would normally be considered appropriate in a closing speech, and some newly revised material. As most of*

*this is too technical to be digested verbally, it has been put in several Appendices here, which will not be read out.*

*Also, to assist the Inspector, those sections of my proof which have required significant alteration as a result of cross-examination (etc), have been rewritten in full in the Appendices here (with the relevant previous versions in my proof to be deleted as noted at the end of the address).*

The conducting of the inquiry has also been made difficult by the refusal of the Department, and the Inspectorate in Bristol, to deal with the questions related to its legal scope. It is true that this only became an issue when NR suddenly demanded at the start of the inquiry in 2017, on their perverse interpretation of s.5(6), that most evidence from objectors should be regarded as legally irrelevant to the decision, something which had never even been hinted at in the previous information about the inquiry given to objectors (i.e. the DfT guides to TAW Act inquiries, and the individual communications from the Department).

We repeatedly pointed out to the Department (and Bristol) the need to deal with this before the inquiry resumed in 2018, in order to avoid the possibility of applications for judicial review afterwards (and the consequent possibility of the whole time of the inquiry being wasted).

But this was wholly ignored by them, even after the Suffolk inquiry went ahead on the basis of *all* the evidence of the objectors being treated as legally relevant to the Inspector's conclusions and recommendations, and the SoS's decision; and this inquiry was allowed to resume on the contrary basis that evidence on matters other than the alternative routes was *not* relevant to the decision and so would merely be 'reported' to the SoS.

## **ASSESSING PAGET ROAD**

Mr Brunnen accepts (Rebuttal 5.5) that 'historical fact is an important consideration when assessing risk at level crossings'. Correspondingly, we do not claim that historical fact is the *only* point for consideration, merely a principal one. Accordingly we have throughout been trying to delve into NR's rules and calculations to see where they are coming from, and that has now for the most part, belatedly, become evident.

We would distinguish between those parts of NR's argument that are based on definite fact and rationality (such as the calculation of necessary sighting distances based on the time it takes a typical user to traverse the line), and those which are based on the exercise of discretion in an inappropriate manner, or merely represent current NR practice on issues which are actually the subject of debate between rail experts. *If every piece of NR current practice were to be regarded as 'unchallengeable', there would be no point in holding a public inquiry at all, as the crossings included in the draft order are by definition ones that 'fail' on that basis.*

To summarise in brief the content of the more technical issues included in the Appendices, we have shown during the course of the inquiry how the supposed

problems and inadequacies of this crossing are based on fallacies and inappropriate use of statistics:

(1) The false claim that up trains are not visible from the south side until they are a mere 83m away.

(2) The claimed insufficient sighting distances in other cases being based on the inappropriate use of the 50% addition for 'vulnerable' users, the alleged number of which is itself inflated above the actual number -14 per week, and then with a very ill-defined 'vulnerability' – because of a deliberate decision to ignore instructions by carrying out surveys at an abnormally busy time.

(3) The installation of a whistle board for down trains (under which the horn is only sounded *after* the train has become visible anyway) purely because there is one for up trains (which is itself only there because of the fallacy in (1)).

(4) The imposition of an unnecessarily low speed restriction for down trains, because of the combination of the factors in (2) and (3), which has been delaying trains unnecessarily, the actual appropriate speed limit being 45mph which would cause no delay whatsoever to passenger trains and only a few seconds delay to the very few other trains.

## RELATIONSHIP OF THE STATION AND THE CROSSING

Obviously it is not the job of the present NR level crossing team to *do* anything about solving the H&S / accessibility difficulties at Wivenhoe station, notably the large horizontal and vertical platform / train gaps on the up platform, but that does not mean that the situation at the crossing should be myopically considered in complete isolation from the changes which will have to be made at the station in due course.

Despite the relaying of the up line (at our request) in 2008, in hopes of rectifying the vertical gap problem, a considerable cant was still left. Additionally the horizontal gap will become some 35% bigger when the new trains arrive in 2019/20, as each carriage will be 20% longer than the current carriages \*\*. (In addition, door closing will be transferred to the driver, which will make the safety of passengers dependent on drivers' ability to look at 12 small screens at the same time). The main reason for the problem not being fully resolved in 2008 was that the engineers were still obliged to cater for the current 50mph speed limit.

\*\* As explained to us by a professional mathematician, Pythagoras' law applies in this case, making the % increase in the gap greater than the % increase in carriage length. The position of all doors in modern carriages towards the middle, with no doors at the ends, exacerbates the situation also on r/h curves.

This 50mph limit however is an anachronism, and has been since all passenger trains began calling at Wivenhoe in 1984. It is (or was) designed to give the highest possible speed for all the former non-stopping Clacton fast trains and summer excursions, *which no longer exist*. For this non-existent 'benefit', the

station is arranged in a way that disadvantages the 400,000 p.a. Wivenhoe passengers who *do* exist. Only by reducing the speed limit, and thereby the level of cant through the platforms, can a safe and equality-compliant station be created. NR nationally is in fact now more actively interested in dealing with 'PTI' (platform train interface) issues, a report on which was issued in December 2017. This however has not yet filtered down to all players.

We cannot say by how much the speed limit will need reducing, and there have been no permanent way engineers at the inquiry to comment on cant issues. But these gap issues will be the main determining factor in the future line speed through Wivenhoe, and clearly the new limit through the platforms will be less than the existing limit, and less than the 45mph speed that we have noted above as required for Paget Rd sighting purposes once the inappropriate factors have been removed from the equation.

This is particularly relevant in the light of the NR claim that they will want to *increase* line speed limits on all branches in future, and that crossings including Paget Rd are a threat to this unless closed. At Wivenhoe the limit through the sharply-curved station and the reverse curves to the east *cannot* be increased to more than 50mph (this was not rebutted). So this point is quite irrelevant here.

Even if there *were*, one day, additional passenger trains that do not call at Wivenhoe (and there has been no improvement of the service on this line in the last half-century!), they should not be allowed to save a few seconds at the expense of the safety of Wivenhoe station users.

## **THE HIGH ST 'ALTERNATIVE ROUTE'**

### **INDEFINITE NATURE OF THE PROPOSED WORKS**

At the PIM, on the first day of the inquiry in 2017, and again on the first day of the inquiry in 2018, we raised strongly the need for the plans of the NR proposals to be produced at the inquiry without delay, pointing out in particular that (it having been agreed by all that alterations *were* required) the SoS could not decide whether the High St alternative route was suitable or not, if no clear indication of its proposed future state was supplied to him.

On none of these occasions would NR agree to produce anything. Instead it was left to be extracted from them, partly by fortuitousness, on 23<sup>rd</sup> October.

It will not be forgotten either that when Ms Tilbrook first began describing the plan on that day, she referred to it as a plan showing

'detailed design features.....and we see them as agreed with ECC should the scheme go ahead.....ECC have not raised any issues with the proposal; we believe we have a proposal that will meet the approval of the Highway Authority'.

However, as soon as the Inspector suggested that the plan should be revealed, she switched tack completely! saying

'I'm not sure whether we should give it out publicly, as it *isn't* a definite thing.....There *isn't* an agreed specification plan signed up with CBC and ECC'.

The second 'story' was of course the true one (*cf* her calling them 'outline proposals' previously in her proof 2.7).

Turning to the 2016 email chain, we see that the first version of the plan dated 2<sup>nd</sup> December 2016 was described as a 'sketch' only by its author the Mott MacDonald engineer Steve Price. When CBC pointed out the need to accommodate bus movements, he produced on 15<sup>th</sup> December the decidedly different second version. This was before ECC had made any comments, and indeed the email chain as submitted ends in February 2017 still with no comments from ECC, except a final Alan Lindsay email saying 'we may have concerns remaining'. Another two years have now passed seemingly without any further progress. If *one comment* from CBC produces a wholly different plan, what sort of further changes are the eventual detailed discussions with the Highway Authority itself going to produce?

NR have made it clear all along that they consider this sort of sketch plan good enough for a TAW Act application \*, which is presumably why they have not been too interested in proceeding further with the design work (after all, if Paget Rd remains open, the scheme will not proceed as such). They argue that the public will be protected by the fact that the crossing cannot be closed until the scheme has been approved by ECC. But this still ignores the point that the SoS has to be satisfied with the suitability of the alternative route before he can confirm the draft order. *The inquiry is closing still without anything being submittable to the SoS that would enable him to make this decision properly.* The SoS cannot be satisfied on the basis that the applicant and the Highway Authority *may* actually agree something one day, nor can he delegate the decision on suitability from himself to the HA. The fact that this is a very difficult location in terms of vehicular and pedestrian movements naturally makes it that much less likely that agreement will be possible, and on top of that nothing has been shown yet to the local parties most intimately affected. (Whereas, with the other crossings in the draft order, the alternative routes are new paths rather than alterations to existing highways, and the details have been known from the start).

\* This view appears to be based on what would *generally* be considered appropriate for a TAW Act application, without considering what might be necessary in this particular case.

It is also clear that Mr Price drew up this 'sketch' in complete unawareness of the existence of the existing 2008 ECC/NR agreed plans, which would already have been implemented long since but for NR's financial demands which ECC has quite properly refused to accept. It is not being suggested that the 2008 plan is necessarily *incompatible* with what NR may wish to do now, but obviously the separate parties need to correlate with each other. Despite my efforts to help them by explaining the whole position, and even giving them a copy of the 2008 scheme plan, in October 2017, the NR team have shown no interest at all in improving their knowledge of the situation, simply because of their refusal to accept that local people may know much more than they do.

In addition they refuse to take any notice of the 20mph zone situation. Again I helpfully gave them a full explanation of the position in my response to rebuttal, but to no effect, as Ms Tilbrook was happily referring to the 20mph zone as if it were *an existing thing* under examination a year later. Even less do they wish

to understand that it is *NR themselves* who have prevented the Zone from being made effective and legal.

As to the proposed path from Paget Rd to Phillip Rd, it is not relevant to more than a tiny fraction of the journeys currently made via Paget Rd crossing, and so is irrelevant to the SoS's decision. Its possible usefulness for *other* peoples journeys is not a matter for the inquiry.

## SAFETY OF THE HIGH ST AS ALTERNATIVE ROUTE

NR scarcely covered themselves in glory when seeking to defend their 'safety audit'. Ms Tilbrook's *expectation* that the audit team would report back that there were no evident problems seems odd in the context of such a complex location. (But since it was discovered how few minutes the 'auditors' spent purportedly examining eight roads in Wivenhoe, *nobody* has been at all surprised at their not noticing anything!).

It was particularly extraordinary that this piece of work should have been used as an example in NR's attempts to depict the evidence of 'non-professionals' as worthless. Had that attack been directed (e.g.) at non-engineers debating the details of bridge design, it might have carried some weight, but to pretend that potential road safety hazards are something that can only be spotted by 'professionals' is much less impressive. And how much the more arrogant was it to claim that the one high-speed visit of NR's auditors at a quiet time of the day gave them a better knowledge than local residents who have walked, cycled and driven along these streets for decades, day and night, summer and winter.

The one attempt by NR (Mott MacDonald) to consider the difficult vehicle movements here, the addition to the sketch of the swept bus path, was itself not thought of by them (it could have been, had the audit team stayed long enough to see a bus!). It was drawn out via a standard computer program, without any attempt to learn of the onsite realities. The swept path is drawn on the assumption that the bus drivers are always free to drive on the wrong side of the road, when in reality they frequently have to turn left from their own side of the road, which is more difficult.

The NR scheme will definitely not do anything for the southern half of the narrow pavement section, leaving the possibility of someone (e.g. by accidentally stepping on the kerb edge) falling into the roadway here in front of a vehicle, or being hit by a vehicle when having to step into the roadway.

**It is somewhat ironic that NR, who claim that the ONLY purpose of the inquiry is to consider the suitability of alternative routes, have themselves ensured in the Paget Road case that this is the only thing that it has NOT been possible to consider properly!**

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## APPENDIX 1

## SIGHTING DISTANCES AND TRAIN SPEEDS

It is agreed by all that the normal acceptable sighting distance for a 50mph line is 170m (i.e. two-thirds of the 256m figure cited by NR for Paget Rd after their silent addition of the 50%, for which see below).

For the purposes of the inquiry we have accepted the NR figures\* of *actual* available sighting distance, viz 170m south to west, 160m north to west, and 240m north to east. (We do not know what NR considers the full view south to east to be, as they only quote the 83m Anglesea Rd 'intermediate obstruction' figure, but it must be around 260m). (See below for the '83m' question).

\* The minor differences between the NR figures and my figures as given in proof p.5 bottom relate purely to seemingly-differing ideas on when a train is deemed to 'become visible' (NR's precise view on this has not actually been defined in writing), plus the fact that I do not have the equipment that NR possesses – NOT to my figures being taken from <2.0m. [Please also note typing error in my proof; north to east should read c.255m, and south to east c.270m].

On the normal 170m required distance basis, these are compliant except that the 160m north to west figure 'fails the test' by a fraction and the required future speed limit for *down* trains with the crossing retained – ignoring the 'down whistle board problem', dealt with later – would be 47mph (signed as 45). With all passenger trains starting away from the station anyway, the only impact on operation would be a few seconds loss to the handful of empty trains.

Turning now to the '+50%' figure of 256m required minimum sighting distance quoted by Mr Fisk, the 160m and 170m figures for the views to the west would require a 30mph limit for down trains instead of 45 (as confirmed by Mr Fisk under examination). The 240m north to east figure also fails by a fraction in this case, giving 45mph instead of 50 for up trains. (Again, see below for the '83m' issue).

With all passenger trains calling at the station anyway, a 30mph down limit would scarcely be a disaster for train operation, however it would be a significant difference from the 45mph without the +50%, and so we must go into the question of the NR rationale for imposing the 50% addition at this crossing.

As Mr Fisk correctly noted, the policy guidance gives Level Crossing Managers a discretion to impose the 50% in any case where there is a special reason for it, instead of always following the general guidance [Fisk Appendix] of not imposing the 50% even when as many as 20% of observed users are 'vulnerable' \*\*.

\*\* It is however clear from this general guidance that decisions should *not* be based on allowing for every *last vulnerable person* – if that were the case, one would have to allow for the dilatory transit time of the very slowest person that ever used any crossing, and so every crossing would end up with a 10mph limit! (taking it somewhat *ad absurdum*). Instead NR effectively adopts on this front the same practical 'minimal probability' approach that the rest of the land transport system relies on.

In normal circumstances the question of whether LCMs have used their discretion properly would be an internal NR matter only. But when a proposal is being brought to public inquiry, the exercise of discretion must be justified rationally to the inquiry. Mr Fisk's cited reason (under examination 23.10.18) was that whilst the *percentage* of vulnerable users here is indeed very low, the

*actual number* is quite high, because of the crossing having a relatively high overall usage. The actual number in question being the 28 out of 1182 in the 9-day July 2016 survey, or 3 per day (which would reduce to 2 per day had NR done the survey in a 'neutral month' as required – see later). The notion that 2 per day is a 'large actual number' is not impressive. Most of them are only defined as 'elderly' (but not 'impaired').

The reality is that this crossing is used to an *abnormally low* extent by 'vulnerable' people, and that the usage is largely single fit adults, with a near-absence of unaccompanied children, and a total absence of mounted cyclists.

**We can conclude, then, that the 50% has been added without justification, and that the 'standard' sighting requirement of 170m should be used here.**

Finally we must turn to the question of the south to east view, which NR claims to be only 83m, on the grounds that, after being visible from a much greater distance (unstated, but it must be c.260m, as noted earlier), trains 'disappear' for an instant behind the south side abutment of the Anglesea Road bridge, when observed from the standard 2.0m distance. Their exact rationale on this has however been inconsistent. It began with the claim in 2014 that a 'light engine' could disappear totally behind the abutment for a second or so, but after it was pointed out that there were *no* light engines on the line, this was never heard again \*.

\* The inquiry has revealed how even some of the NR staff most involved lack even the most basic knowledge of the train service on this line (even though this can be discovered from a public timetable) – Mr Kenning admitted under cross-examination that he *did not know* that there were only two trains an hour each way in the 'standard service'.

It was next stated (2016 letter to Town Clerk) that *an 8-car train* becomes briefly invisible, an extraordinary claim given that, even when the front of the first car disappears for a fraction behind the abutment, the curvature of the line actually enables the whole of the rest of the train to be seen at a broad angle from 2.0m, – the same applying for a 4-car train too.

Most recently, Mr Fisk under cross-examination by Cllr Liddy stated that it was the visibility of the *front* of the train that mattered, but then added 'a 4-car train certainly disappears, an 8-car train also maybe, I'm not sure'. (He presumably did not *mean* to say that, as even the most unrailwaylike person knows that the visibility of the 9ft wide front of a train is in no way affected by how many carriages there may be behind! – so the inquiry ends without us really being able to get to the bottom of NR's rationale).

The question of whether or when a train is 'visible' is however a matter for the inquiry to decide for itself. **And the reality is that trains are visible south to east from around 260m.**

It might be noted that the minimum length of train will *increase by 50%* in 2019/20 when the new trains take over, from 4 cars now, to 5 cars of greater length equating to six present car-lengths.

The question of **night** visibility was also raised. Mr Fisk stated that the headlights themselves must be visible. But as a site visit will show, the approaching trains are if anything *more* obvious in the dark, because the



headlight beams shine down the rails, on top of which the brightly lit train windows are conspicuous at some points.

#### South Side Viewing Point:

It is accepted that the south to east view is noticeably better at 1.75m from the line compared to 2.0m. At 1.75m a significant part of the front of the train remains visible as it passes Anglesea Road bridge. This is the best point to stop and look.

We do not in any way challenge NR's *general* policy of regarding anything less than 2.0m as a 'position of danger', e.g. for staff working near the line (bearing in mind though that, as Mr Fisk explained, 'position of danger' does not mean that one will get hit by a train at 2.0m – in fact one is some 1.3m clear of it). Rather, 2.0m is a sensible distance for general use on the basis that somebody *engaged in activity* near the line may involuntarily or carelessly *move closer to it* without realising. However, at a foot crossing it is possible to install railings. The present railings at Paget Road south side are set back further from the line at a point where there is no useful view either west or east. It is not really clear what their present purpose is deemed to be \* – if anything they are likely to result in people accelerating away from them just at the point where they ought to slow down to look right!

\* No reference has been made by NR to the use/purpose of railings at crossings, and when we raised this in our objection the only response from NR (29.8.17) was 'The purpose of the order is to close crossings, therefore these points are not relevant'. It is nevertheless assumed that NR do see *some* purpose in the provision of railings!

The railings here might be more usefully positioned nearer the line at a point where they (a) slow people down at the point where they need to look, (b) force them to look right at a point where a good view is available, and (c) then force them to face west to check in that direction. A person standing behind a railing cannot move or fall forwards, so the east side post of the northernmost railing (behind which people could look right) could be positioned a little closer than 2.0m.

## APPENDIX 2

### USAGE COUNTS

We must also deal briefly with the problematic July 2016 user count (the one which NR has used for the purposes of their inquiry evidence).

Both in her proof (1.8.2) and under cross-examination, Ms Tilbrook was quite blatant about their decision to ignore DfT guidance that counts should be done in 'neutral' months (which indeed is also a normal practice at large), and instead to deliberately do it in the midsummer period 'because we wanted to see what the *maximum* numbers were'. Even NR's own guidance (4.1 and 4.3 in Fisk Appendix section 3) tells them to do surveys at two different times of

year when appropriate. Had they simply wished to establish maximum numbers *as well as* typical numbers, there could be no real criticism; but what they have done is to note summer peak numbers only, and then *use them for purposes for which they should have used representative numbers!*

In the process they recorded the wholly untypical figures for the Regatta Saturday. (The figures for 16<sup>th</sup> July show that ordinary Saturday numbers are not significantly higher than Mon-Fri). If we delete the Regatta day figures (as any professional statistician would) this survey shows an average of 108 users per day, and if this were then amended to give a mean all-year figure, we end up with say 90-100 per day. \*

One significance of this distortion is that Mr Fisk had bigger 'actual numbers' of vulnerable people to 'justify' his addition of the 50%.

\* Compare the 67 per day average of the October 2012 NR survey (counting the full days only) which was (a) in the autumn not midsummer (b) included three days of bad weather, whereas the July survey had fine weather throughout, and (c) was prior to the occupation of the later houses in the Cook's shipyard development.

## APPENDIX 3

### THE CURRENT 20mph DOWN LINE RESTRICTION / WHISTLE BOARDS

This is simply a synopsis of the full account in our recent supplementary submission on the subject.

NR has now confirmed that the *only* reason for the current temporary down line restriction being as low as 20mph – as distinct from the 45mph that would be used based on sighting distances (or 30mph without the addition of the 50%) – is the position of the down whistle board, which they say cannot be moved to a normal distance further from the crossing because of the limited clearances by the retaining walls.

They have also confirmed that the down whistle board is *not* necessary in itself, but is only required under the rule that if there is a whistle board in one direction, there must be one in the other direction too. In addition to the above, we also know that the up whistle board is itself only present because of the '83m' Anglesea Road bridge claim.

In addition, we know that the up whistle board is only provided because of the '83m' claim.

Clearly *both* boards are only there on marginal, challengeable, or not universally-held interpretations, and could actually be removed, and thereby enable an increase of the down line speed from the present 20mph to 45 (or 30) mph, AND free the inhabitants of Wivenhoe from their years of NR noise harassment. All this is clearly an issue on which 'rail experts disagree', and there is no reason to meekly kow-tow to the current official NR practice on this.

In addition NR have gone out of their way to make temporary restrictions of this type cause *more* time loss to trains than necessary. Even though trains passing through a *crossing-related* speed restriction could actually start accelerating away the moment the front of the train passes the crossing (given that people can only be hit by the *front* of a train), NR pointlessly insists on imposing the same rule in these cases as is used for 'condition of track' speed restrictions, where the driver must for obvious reasons not accelerate until the rear of the train has left the restricted section\*\*. NR claims '40 seconds' lost time for trains here, but much of that must be due to the irrational system used. (Additionally, the termination board here was placed 60m further east than necessary, until we pointed this out last year, when it was immediately moved back to the crossing itself!).

\*\* email from a GA driver on this – 'Occasionally an extra [sentence] will appear in the Weekly Notice permitting drivers to accelerate when the front of the train reaches the T board, but I don't think this piece of common sense is officially sanctioned'.

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## **DELETIONS TO BE MADE TO PROOF AND 'RESPONSE TO REBUTTAL'**

### **PROOF**

The whole of the 'Sighting Distances and Safety' section on pp.5 and 6 is replaced by Appendix 1 here, 'Sighting Distances and Train Speeds'.

The 'Reducing Delays to Trains' section is replaced by Appendix 2 here, 'The Current 20mph Down Line Restriction'.

The 'Usage Figures' section is replaced by Appendix 3 here, 'Usage Counts'.

### **'RESPONSE TO REBUTTAL'**

2<sup>nd</sup> and 3<sup>rd</sup> page, re Fisk, section beginning 'It is impossible.....' is replaced by the relevant comments in appendix 1, 'Sighting Distances and Safety'.