



Neutral Citation Number: [2022] EWHC 2099 (QB)

Case No: QB-2020-001319

IN THE HIGH COURT OF JUSTICE
QUEEN'S BENCH DIVISION

Royal Courts of Justice
Strand, London, WC2A 2LL
Date: 8th August 2022

Before :

HIS HONOUR JUDGE GRAHAM WOOD QC
Sitting as a Judge of the High Court

Between :

MEGA TRUCKING COMPANY LIMITED

Claimant

- and -

HIGHWAYS ENGLAND COMPANY LIMITED
(1)

CONNECT PLUS (M25) LIMITED

Defendants

Andrew Prynne QC and Emma Jane Hobbs (instructed by DWF solicitors) for the Claimant

Adam Weitzman QC (instructed by DAC Beachcroft solicitors) for the Defendants

Hearing dates: 12th-18th July

Approved Judgment

I direct that pursuant to CPR PD 39A para 6.1 no official shorthand note shall be taken of this Judgment and that copies of this version as handed down may be treated as authentic.

His Honour Judge Graham Wood QC

Introduction

1. On 1st November 2013, a Scania articulated tractor and unit driven by Jan Mirek, a Polish national, was travelling on the M25 motorway in a westerly direction in the left hand lane between junctions 24 and 25, using the hard shoulder whilst roadworks were being carried out to create a smart motorway, when the nearside wheels strayed from the carriageway (known as the “pavement”) onto the verge area and over a filter drain. In an attempt to return to the carriageway by steering and braking, Mr Mirek lost control of the vehicle which tipped onto its nearside and slewed across all three lanes crashing into the central barrier. The central barrier gave way and as it became detached three motorway construction workers were trapped, including Mr. Mihai Maier, who sustained very serious crush injuries to his lower legs. He was airlifted to hospital, but subsequently required the amputation of both legs, sustaining life changing injuries. His claim against the driver’s employers, who were vicariously responsible for the driving of Mr Mirek, was settled in the sum of approximately £8 million at trial in 2018. No other party had been sued by the injured workman.

2. However, that was not the end of litigation relating to this tragic accident. Mr Mirek’s employers, Mega Trucking Ltd, who were the Defendants in that claim, subsequently sought a contribution from the Highways Agency (later Highways England Company Ltd and now National Highways¹) on the basis that the state of the highway verge and the layout of the motorway during the temporary traffic management of the construction works had been in disrepair and not properly maintained in breach of section 41 of the Highways Act 1980. This claim had not been intimated during the course of the earlier litigation.

3. In the proceedings which were commenced (the present claim), the Highways Agency sought to join Connect Plus (M25), a consortium of companies contractually responsible for the roadworks and the conversion to a smart motorway pursuant to an indemnity. The principal contractor within that consortium was Balfour Beatty Skansa (BBS) and for reasons which do not require elaboration within this judgment, the defence to the contribution claim has been handled by BBS and its insurers. Accordingly reference is made to the Defendant and BBS interchangeably.²

4. The trial was heard over five days in July, and I reserved judgment to enable a detailed consideration of the evidence and the substantial documentation which had been referred to.

¹ Referred to as Highways Agency wherever appropriate in this judgment for shorthand purposes

² Also referred to as SSBJV – see para 9 and glossary of abbreviations

Outline of the evidence and issues in this trial

5. The Claimant did not rely on any oral evidence. Sadly the driver of the truck, Mr Mirek, recently passed away, and his hearsay evidence was adduced in statement form. Reference was also made to the contemporaneous police interview following the collision. The Defendant called several witnesses who were involved in the motorway works at the relevant time, the project director, project manager, the traffic management manager and the traffic safety officer.

6. There was also reliance by both parties upon expert evidence from highways consultants with experience in traffic management and highways construction compliance, and the Defendant called an expert physicist in accident reconstruction and tachograph analysis.

7. It was agreed that the issues related to the condition of the filter drain running alongside the hard shoulder, also known as the French drain, in the context of the single pleaded cause of action, namely a breach of section 41. Although there is an absence of complete agreement as to how the issues should be approached, for the most part the evidence and the submissions of counsel have addressed the following discrete issues namely: (a) what was the cause of this accident, and the loss of control of the articulated vehicle; (b) insofar as the filter drain or the verge was implicated causally, what was the state of the filter drain at the time of loss of control; (c) did that condition amount to a want of repair, danger or trap so as to give rise to a potential breach of duty under section 41; (d) if so is there a defence available to the highway authority (or here the party standing in the shoes of the highway authority, BBS) under section 58; (e) if not in what proportion should blame be attributed between the Claimant and the Defendant for the accident which befell Mr Maier, having regard to respective culpability and causation?

8. It seems to me that this stepped approach is the sensible way in which to consider the evidence and the arguments in a case which at times has had a tendency to descend into a technical and overly complex analysis, and to examine the duties of highway authorities and those responsible for motorway construction beyond the somewhat narrow statutory responsibility under the Highways Act.

9. In an attempt to simplify the technical detail, which has abounded with acronyms and abbreviations, and to make this judgment more understandable in the context of the witness evidence and documentation, I set out below a brief glossary.

Glossary of abbreviations used

TM	Traffic management
TTM	Temporary Traffic management
TMP	Traffic Management Plan
ALR	All Lane Running
DBFO	Design Build Finance & Operate (Contract)
DMRB	Design Manual for Roads and Bridges
CSI	Casualty Severity Indicator
SBBJV	Skanska Balfour Beatty Joint Venture
HCD	Highway Construction Detail
TSCO	Traffic Safety Control Officer
LUS	Later Upgrade Section
DSR	Design Strategy record
IAN	Interim advice note
TSRGD	Traffic Signs Regulations and General Directions
TSM	Traffic Signs manual (short form of above)
AI	Aggregate Industries
CBR	California (Load) Bearing Ratio

Background and undisputed evidence

10. Between 2009 and 2015 BBS became involved in the main construction and design contract at the invitation of the Defendant for the widening of the M25 motorway between junctions 16 and 27, and its conversion into a smart motorway with ALR, that is four lanes in each direction without a hard shoulder, but with variable speed control. It was a substantial project for what is agreed to be the busiest motorway in the United Kingdom, and possibly in Europe, taking up to 60,000 vehicles per day, one third of which were heavy goods vehicles. This meant that the work had to be done in phases, with the use extensively of TTM before the permanent works were completed. The TMP was developed in conjunction with a subcontractor, AI, who provided design, installation and maintenance input to many aspects of the TTM. The design schemes which were drawn up were the subject of certification and

eventual approval at a number of layers, including the primary employer, the Highways Agency.

11. Invariably the operatives of BBS would undertake the preparation of construction work to the nearside of the motorway which included converting the hard shoulder into an operating lane and creating verges with proper drainage systems, as well as the roadside furniture, barriers, gantries and so on, before moving to the works to the central reservation including construction of barriers.³

12. Protection of the workforce was a priority, and it was undertaken with the imposition of a mandatory 50 mile an hour speed limit, and Varioguard barriers for those working on the central reservation. It is common ground that in order to keep the motorway traffic flowing with three lanes in either direction, space was tight, in the sense of that each lane was narrower in the TTM than it would be with the permanent works completed. This required the nearside lane, occupied mainly by HGVs, to be 3.25m⁴, the middle lane 3m, and the outside overtaking lane 2.75m.

13. In relation to the conversion of the hard shoulder into a temporary running lane, work was undertaken to the verges at the side of the existing hard shoulder which was substantially concrete. This included some replacing but largely upgrading the existing filter drains which were designed to allow water to drain from the motorway surface and to avoid pooling which itself could create a hazard. Many of these drains were formally topped with stones, which whilst acceptable for a hard shoulder where vehicles were simply stopping or slowing down for emergency purposes, created a further potential hazard with what is known as stone scatter, if vehicles were passing by at speed or overrunning, that is straying from the carriageway into the verge area.

14. Accordingly the filter drains which were constructed to a specific design were upgraded with the overlay of asphalt planings intended to provide a firmer surface with a degree of hardening and at the same time avoiding stone scatter. This design was not just for the temporary scheme, but to be permanently in place when the motorway was completed, by which the hard shoulder would continue to be used, and potentially at the national speed limit of 70 mph, as a running lane.

³ In fact, BBS had a DBFO contract with the Highways Agency to manage the entire M25 network and ongoing improvement works over a 30 year period.

⁴ Whilst the width of the nearside lane at the accident locus was stated by the police officer in his report to be only 3 m, it has not been seriously challenged that this is likely to be an error and the more accurate assessment was closer to 3.3 m on the basis of the evidence of the defendant's physicist.

15. There was a specification which was followed for the construction of the filter drain and its upgrading. It has been the subject of considerable scrutiny in the course of the evidence. The particular design had been in use prior to the accident since 1998 and it was based upon a drawing taken from the DMRB, a manual which contains much of the construction detail for highway design. The HCD, which was intended for the edge of pavement details, provided a design known as “Type X” amongst alternatives, which has been referred to during the course of the hearing as drawing B15. The drawing shows a cross section with the relevant part of the carriageway being the hard shoulder and the verge (because it is concerned with the edge details as the pavement, or carriageway abuts the verge), and the verge on the left of the drawing shown as a hatched area set immediately above the filter drain with the various composite materials of the drain indicated in the notes. As Mr Runacres, the Claimant’s expert confirmed, the filter drain itself does not run up to the very edge of the pavement, because it is vertical, and the three sub levels being the concrete carriageway, the sub-base and the capping, overlie each other with the capping level the widest, thus creating a gap from the slope which is clearly shown in the diagram. Significantly, this drawing shows that the depth of the sub-base material which overlies the drain itself should be 150 mm at least, and taken to the edge of the carriageway.

16. The unchallenged evidence of the Defendant is that the upgrading of the filter drains provided asphalt planings for this sub-base material to a depth of 200 mm prior to the accident and in all respects the drains were compliant with type X in B15. The drawing also shows that a lip or step between the motorway surface (carriageway) and the top of the asphalt planings was intended to be 25mm, and the slope from that lip to the middle part of the filter drain was approximately 5°, thus anticipating that the level difference between the carriageway and the top of the filter drain (containing the asphalt planings) would be slightly greater than 25 mm.

17. The witnesses of BBS were unable to say whether or not the Type X filter drain had been the subject of load testing for errant vehicles by driving over the asphalt plainings, although it was not challenged that in the course of construction there would have been heavy plant and other vehicles passing over on a frequent basis without any evidence of collapse or its unsuitability to support such vehicles. However, it is considered that by following the design detail, BBS were adopting best practice.

18. This was the filter drain construction design that was in place at marker post 141.4B, which is the point at which Mr Mirek’s vehicle strayed from the motorway.

19. The DMRB contained a number of design standards for the construction of permanent works which were relevant to surface and groundwater filter drains which were referred to during the cross-examination of the experts, and I shall deal with any relevant features later in this judgment.

20. In relation to the TMP generally, and the layout of the TTM it is common ground that the guidance to be followed (the “motorway Bible”) was chapter 8 of the TSM. Again some elements of this guidance were scrutinised with the expert witnesses, and will be referred to below.

21. On the day of the accident, Mr Mirek had been driving his Scania articulated HGV, comprising a G420 tractor unit and trailer which was laden with car parts. The maximum permitted weight of the tractor unit was 18 tonnes, and of the trailer 39 tonnes, but it is not known what the actual weight was at the time. There are numerous photographs available of the tractor and unit, but the salient features are that the tractor unit had two axles, the steering axle containing single wheels, with the driving axle behind having double wheels, and the trailer unit with three single wheel axles. All axles were controlled with an ABS system.

22. Mr Mirek was a Polish national, who had three years of experience as an HGV driver in his home country, but had only been in the UK for a few weeks working for the Claimant company at the time of the accident. He had picked up the vehicle on 1st November at Grays in Essex and was intending to drive the load following a route involving the M25 motorway in an anticlockwise direction with the ultimate destination being Coleshill in Birmingham (the DHL depot). Whilst Mr Mirek in his statement to the police is able to describe his approach to the accident locus, in terms of speeds these are best derived from the unchallenged evidence of Mr Fidler, who interpreted the tachograph⁵. Mr Mirek described how a few kilometres before the relevant marker post he had been travelling in lane two, before moving over to lane one, i.e. the hard shoulder. Otherwise his own description of what happened is drawn from his witness statement which was made on 8th November with the aid of an interpreter and has been served pursuant to a Civil Evidence Act notice:

“I had gone some 2 km or so, and am on a straight section of road. Suddenly I experienced my lorry being pulled to my left and so I try and steer slightly right to stop it. I having (sic) nothing on my right in lane one but I try and keep in lane one. Concentrating on my driving I not look in my mirrors (sic) so I have no idea what if anything is behind me. I now realise that all my left wheels, all five of them are on the gravel off the motorway. They stay on the ground for about 100 m. I am on the brakes. I brake gradually. I next realise that my cab front right⁶ wheel (sic) comes back onto the road. At the same time the whole front of my cab rises into the air. This forces my body up into the roof of the cab. I hit my head before returning to my seat. After that I don’t know exactly what happened, until I find myself and the whole vehicle lying on its left side moving across the motorway. My seatbelt I think holds me in my seat. I see the safety barrier moving as we slide into it...”

⁵ dealt with at paragraph 103 below

⁶ It is agreed that he is probably referring to his left wheel at this point

23. Mr Mirek then goes on to describe the aftermath of the collision with the barrier and the workforce which is not directly relevant to this contribution claim.

Police Report

24. The police and the emergency service attended the scene of the collision, and whilst the motorway was still closed an officer from the serious collision investigation unit, PC Simon Gladstone, was able to carry out a detailed inspection incorporating his findings into a later report. Significantly he surveyed the scene using a device known as a Reigl laser scanner which was also able to provide photographic evidence as well as measurements⁷. The police officer provided 21 colour photographs taken “manually” which have been central to the discussions in this case and have been scrutinised by all the experts.

25. The officer noted the presence of the French drain at the edge of the carriageway, having started his examination 250 m away from the point of the collision, that is to the east of marker post 1414B. After examining the verge, he made this observation, which has been relied on by the Claimant:

“The surface level of the stones was lower than that of the carriageway and there was evidence that vehicles had driven over the ‘French Drain’.”⁸

26. He reported on the width of the westbound carriageway lanes, including the inside lane (hard shoulder), believing that to be some 3 metres, although as indicated above this is probably wrong. He noted that temporary Varioguard crash barriers were being used to protect the workforce in the central reservation. At paragraph 4 of his report, the officer recorded the numerous black tyre marks and other scrape marks on the motorway surface, as well as the gouging or rut to the French drain which is depicted on several of the photographs, but most notably on the photograph now at B269 in the bundle, showing that the significant disturbance or deeper rut began at or just beyond marker post 1414B and level to the yellow plastic marker which the officer had placed in the road number 3. (These police markers which number 1 to 4 are important datum points for the laser measurements which have been scrutinised by the experts, particularly Mr Fidler. Significantly he was able to note long curved tyre marks varying between 35 and 37 metres across the three lanes starting at

⁷ The data collated by PC Gladstone was subsequently analysed by the defendants physicist, and is referred to when I consider his evidence below.

⁸ My emphasis

police marker 4, suggesting that this is where the nearside wheels of the Scania moved out of the verge.)

27. In relation to the verge crash barrier, the officer noted that there were scrape marks consistent with a collision with the nearside of the vehicle at about same point.

28. There was nothing significant to note following his examination of the Scania truck, and having collated all material, including witness statements from other drivers and the tachograph data, he considered Mr Mirek's explanation for the loss of control, much of which was elicited during the course of the police interview. PC Gladstone noted the account given by Mr Mirek that he had steered hard to the right to get out of the French drain which he considered was an implicating factor in causation.

29. His conclusion was:

"Mr Mirek's vehicle drifted into the "French Drain" which affected its handling. In an attempt to rectify the situation Mr Mirek over corrected for this and steered harshly to his right. This resulted in the vehicle becoming unstable and toppling over.

In the absence of any other causation factors, the loss of control on a straight road with good visibility leads me to conclude that this collision occurred as a result of a momentary lapse of concentration leading to the nearside wheels leaving the carriageway."

Previous incidents involving motorway verge/hard shoulder on the M25

30. There have been three other road traffic accidents/incidents in the week running up to the subject incident and shortly after involving the roadworks for which BBS was responsible on section 5, between junctions 23 and 27. These are set out in the various reports which I detail below, and appear to have been the catalyst for the WS Atkins report.⁹ They have been scrutinised to determine whether or not they are demonstrative of a general or systemic want of care by the contractor, or a poor design of the TTM. The first of these occurred on 29th October at 12.15 and was a fatal accident involving a lorry driver whose vehicle clipped the ramped approach terminal of a section of Varioguard on the clockwise junction 25 slip road, before overturning and catching fire leading to the tragic death of the driver. The second was the day before the subject incident and again involved an HGV. There is not much detail provided, but it would appear that the vehicle left the carriageway close to marker post 142/4 between junctions 24 and 25 before coming to a rest, although destroying or damaging some roadside furniture. The driver was uninjured. The third, which occurred on 2nd November in the morning involved a private vehicle which drove into the works access in the central

⁹ See paragraph 32

reservation between junctions 24 and 25 and which was caused to flip over by the Varioguard ramp causing injury to driver and passenger.

Other Reports and Investigations

31. There has been a focus during the course of the trial on various reports from different bodies which were commissioned/written in the weeks and months after this serious incident. They are detailed as follows.

WS Atkins report (First)

32. The first of these, chronologically, was a road safety assessment report commissioned by the Highways Agency in the immediate aftermath of the accident. It was provided by the specialist consultant engineer/designer responsible for overseeing the design of the permanent works. There was a clear concern about several accidents within a short period of time, two of which were relatively serious, and the Highways Agency was undoubtedly interested in knowing whether or not there were systemic failures in design of the TTM. This report, which appears at page B149 in the bundle has been referred to in the evidence, and is relied upon because of an oblique criticism which appears to be made generally about verge levels. It was provided following an attendance at the site and various locations by the assessor, whose name, for reasons which are not entirely clear, has been redacted, and he/she described the brief as involving a request to give an opinion on the “*adequacy of the temporary traffic management used on the scheme*”. An inspection was carried out of the edge of carriageway detail at various unspecified locations. It was noted that in places the continuous plain white line which was intended to be situated some 200 mm from the edge of the pavement was in places right at the edge of the carriageway and in other places it had worn away to nothing.

33. The assessor reported on driving through that vehicles were noted to commonly track into the filter drain, particularly on left-hand curves, with some displacement of stone. The specific comment by way of a legend to photograph 2 and 3 was:

“Driving through the works it was evident that it was common for vehicles to track into the filter drain particular on left-hand curves. Stone was displaced. The surface level was low. Repairs to the filter drain had been carried out using road planings.”

34. The conclusion of the report, which is potentially significant, is as follows:

“In my opinion the nearside trailer wheels of an articulated HGV are most likely to track the filter drain first, and in that case it is likely that the tractor unit would usually be able to pull the trailer out

of the stone without loss of control. In my opinion, in both RTAs the nearside wheels of the tractor unit probably left the pavement and the vehicle became trapped in the filter drain, the one coming to rest on the verge, the other swerving across the carriageway as a result of over correction.

A normal detail for the nearside edge of lane one on a motorway comprises a rib line..... which gives a rumble warning to drivers that they are at the edge of the carriageway. It is also normal for there to be a hard strip of say 300 m beyond the edge line to accommodate the overrun, or a kerb to give some physical restraint. In temporary situations, as pertaining in roadworks, white lines are often replaced by reflective studs, which also give a rumble warning to drivers albeit at lower frequency.

The use of any of the options available, or a combination thereof, particularly on left-hand curves, a rib line additional pavement or studs would reduce the risk of loss of control accidents where vehicles leave the carriageway on the nearside.”

Second Atkins Report

35. WS Atkins provided a second report which was in tabular form in December 2013, addressing compliance of the TTM with the requirements of chapter 8 of TSM by reference to the various subheadings within that chapter. The conclusion of the safety auditor (which has had limited reference in the course of the evidence) was that in most respects the arrangements were “apparently compliant” although in some respects, which have no particular relevance to the issues in this case, qualifications were provided. The report was also the subject of inserted comment by BBS which has seemingly informed the report which they themselves provided on internal investigation.¹⁰

HSE investigation report and action

36. Within a few days the HSE became involved. Employees of BBS had been seriously injured, and a question arose in relation to employer duty compliance. The investigation report (bundle page B145) appears to have been compiled after a fluid process, with an initial examination of the accident locus and the reinstatement of the damaged verge. Consideration was given to the preventative measures taken by BBS prior to the incident and subsequently when there had been discussions following meetings with representatives of the contractor. It is clear that the HSE had a concern about the absence of any risk register or risk assessment which dealt with the overrunning of vehicles and requiring a more vigorous involvement in monitoring and assessment going forward.

37. There was a significant meeting on 12th March before the report was produced attended by representatives of the contractor and two of the HSE inspectors. A detailed note is available of this meeting in which explanations were provided about the design methods which were used, and compliance with the HCD specification, and enquiries were made by the HSE officers as to its suitability. A concern was expressed as to the way in which BBS had responded to HSE requests about effect steps for mitigation and improvement of any risk from the running off of the vehicles. It was made clear by Mr Chris Till, the construction

¹⁰ See para 40 below

manager, that alternative methods for strengthening the French drain were being trialled to provide an improvement beyond what was already considered to be a best practice. Questions were raised about the use of cones where there could be insufficient hardening of the drains, and about the extent to which incidents were being monitored. There was also a concern about the monitoring of white line obliteration.

38. Following this meeting, in which it was indicated that no improvement notice would be served, seemingly at the same time that the investigation report was published, on 6th May 2014 the HSE wrote to BBS providing a contravention notice and a request for the payment of fees in relation to their intervention. The salient parts, which understandably have been referred to in cross examination, are as follows:

“Regardless of potential driver error and subsequent culpability, my investigation centred around the identification and control of the risk relating to road side drainage features and in particular, loose fill drains adjacent to the carriageway when hard shoulder running. In my opinion, the risks related to these particular drainage features had not been effectively identified and assessed.

As you will be aware I met with relevant team members on 12 March 2014 to put forward my concerns and ensure action was being taken to address them. As a result of this meeting and subsequent confirmation by Mr Clarke (project director), I do not intend to serve a Notice on you requiring further improvement.

Potential for errant vehicle over-run - I could not identify any record of these features being formally identified on the risk record albeit that action was taken to reduce the risk of stone scatter by partial replacement of the drain in-fill with compacted material. There does not appear to be any indication that due consideration was given to potential vehicle stranding.

Identification of road edge and high risk areas - there does appear to be a simple reliance on Chapter 8 which does not adequately address this issue, and at best is a minimum standard. As we discussed the option of using a rib-line is available and also looking at higher risk points, such as left bends, for additional marking or signage.

Monitoring - prior to the incident the monitoring and feedback regarding issues with these features did not appear to be effective. This was noted in the report conducted by Atkins following the incident that indicated areas of significant over-run and degraded shoulder marking.”

39. Thus, the HSE was focused on risk assessment and monitoring, and was impliedly critical that whilst there had been reliance on “minimum standards”, without there being any failure of design or any inherent defect, more could be done to prevent recurrence.

Internal investigation and subsequent improvements/upgrades to the verge/filter drain

40. BBS carried out its own detailed investigation and a report was prepared by Mr Till. It is headed up “*Lessons learnt and recommended actions*”. Of course, to an extent it is self-serving and of limited value insofar as it may be relied upon to exculpate any responsibility that the Defendant may have for a breach of its statutory duties, but it is important in one

particular respect in that it identifies the response of BBS, particularly in relation to the redesign of the filter drains and the hardening material, as well as other measures to prevent recurrence of a similar accident. In addition to the new design for the verge filter drain, it was indicated that further minimum requirements would be implemented for the temporary hard shoulder for the duration of the TTM whilst the ALR scheme was completed. These included the provision of a temporary ribbed line 100mm wide installed 200 mm from the carriageway edge, the placement of “soft verge” signs, and cones in high risk areas, particularly left-hand bends, with cone strikes and verge run-offs by errant vehicles recorded. A procedure for specific risk assessments and slip roads was also to be put in place.

41. As far as the new design was concerned, the report contained detailed drawings for the “*Type Y highway construction detail*” which differed from the previous detail in B15, in that it contained a greater depth of asphalt planings (now 400mm compared to 250 millimetres previously) and a further 300 mm of angular stone between the asphalt planings and the edge of the verge. Further, in the trial process which enabled this new design to be tested, compression loading was applied with vehicles driven over the filter drain, albeit not at speed. Thus BBS was confident that a drain had been devised with greater hardening which would avoid the risk of recurrence, and which could be used as a permanent solution for all the filter drains in similar locations.

Highways Agency

42. The final report/review was prepared by the Highways Agency itself and before the HSE investigation had been completed. It was the subject of only limited reference during the course of the evidence, but I include it for the sake of completeness. It was not specific to the subject incident, but noted and responded to the four separate incidents within a short period of time, reporting to the Secretary of State. The overall conclusion was that the traffic management layout complied with the required standards, but it was the nature of the works, requiring a narrowed lane width, which made greater remedial measures difficult. The report observed:

“The review has identified that two of the recent incidents relate to vehicles straying off the carriageway to the nearside and two relate to interaction with barrier ramped ends. The review has highlighted potential measures which could be taken to address these issues, in particular, the replacement of ramped ends of barriers with crash cushions and providing greater width between the edge line and the edge of the carriageway. Neither of these measures, however, can be achieved without compromising on the lane widths and working space both of which would give rise to different safety problems.”

Evidence

Lay evidence

43. The Defendant called four “live” lay witnesses. The first of these was Verdun Davies who was the senior works manager responsible for the organisation of the workforce at the time of the accident. He had no specific role in the establishment of the TTM, although he was aware of the various features, including the operations of the French/filter drain and the application of the TSM chapter 8 requirements. Having a responsibility for the maintenance teams, he was also able to comment on the extent to which BBS operatives would deal with any maintenance or disrepair, describing these as either category one or category two defects.

44. He was questioned under cross-examination about the method statement for the temporary verge widening (bundle page A266) dated 11th October 2013, indicating that this would have been one of several revisions, and accepted that he would have been responsible for the teams undertaking this work, although he could not say specifically when the work was done. It was pointed out to him that the DBFO (essentially containing the contractual obligations of BBS and the requirements which his teams were required to follow) provided for temporary road markings to include a 200 mm wide white line at the left of the hard shoulder when it was used as a running lane, which was seemingly greater than that specified in chapter 8 (100 mm). Mr Davies accepted that this was the case, although he thought that 100 mm was sufficient. Otherwise he was not in a position to comment on design aspects and in particular whether the French drain was capable of withstanding the weight of a fully laden HGV. He explained that for the purposes of hardening the French drain the asphalt planings would be compressed with handheld compaction plates or rollers.

45. Mr Christopher Till, the author of the report referred to in paragraph 40 above was the Defendant’s principal witness. He provided two statements. His specific role at the time was that of construction manager, although he had since moved on, remaining with BBS to become a project director. He had a vast amount of experience in motorway improvement and had been involved in the M25 widening scheme from its inception in 2008. He was able to give evidence on the order in which the construction work was undertaken, and provided detail about the various drainage solutions for the verges, and the extent to which the use of the hard shoulder as a temporary running lane impacted on the width of the carriageway generally. His evidence was significant in the context of the subsequent improvements, as he was principally responsible for the new design of the type Y filter drain referred to above. He produced the report of which he was the main author, and it describes the testing carried out for the type Y filter drain, as well as the other measures which have been put in place (ribbed line, specific risk assessments, soft verge signs, cones and monitoring).

46. Mr Till was cross-examined at some length by counsel for the Claimant. He indicated that on attending after the accident, his initial concern had been the apparent failure of the central reservation barrier (Varioguard) as it was clear to him how the vehicle had left the filter drain from the damage caused to the asphalt planings and how control had been lost. This was the reason why he had focused on other aspects when taking photographs.

47. In relation to one of the photographs which appeared to show that there was no white line beyond the point at which the vehicle had left the verge area and adjacent to the barrier, Mr Till did not accept that this was the case, although it might have been fading in places.

48. Because he had been present during discussions with the HSE, Mr Till was extensively questioned about some of the express and implied criticisms made by the inspectors. He himself had taken a minute of the meeting in March 2014. In respect of the HCD detail (B 15, Type X) he was not aware of any standard for load-bearing tests, and the hardening process with the use of asphalt plainings which were compacted as they had been at this locus, had been in place for a number of years with no incidents of a similar nature. The CBR, as a method of testing the load may not have been helpful for determining both horizontal and vertical forces. He accepted that the primary purpose was to avoid stone scatter, which in itself presented a particular hazard if the hard shoulder was a running lane. When the Type Y design was created and tested, it was possible to use CBR, and he referred to the photographic evidence of the testing processes, including heavy vehicles being driven over the compacted and hardened new filter drain

49. Mr Till did not believe that the original state of the drain had any causative part to play in this accident, although he accepted that a number of steps were taken to improve the verge following it, which were already being considered before the HSE made its observations. He did not accept that the HSE inspectors were unimpressed with the steps which were being taken by BBS to address improvements. The suggestion that they were “cherry picking” parts of chapter 8 and ignoring others, was an unfair criticism, whilst he professed that he was not an expert its application; he was, however, prepared to acknowledge some negative comment in the recorded minute particularly in relation to communication, even if this may not have been strictly accurate. There had been a collaborative approach with the HSE inspectors on the basis that moving forward, particularly with the design for a reconstructed French drain, BBS would be providing a new industry standard.

50. He was asked about specific DMRB advice (which had been included in his *Lessons Learnt* report) in respect of drainage features, and in particular the following:

“DMRB Highways Advice 83/99 Paragraph 2.1 – It is essential that drainage features should be efficient in removing water from the carriageway. They must also be safe and structurally adequate for normal usage and that which may occur during motorway lane closures and consequent trafficking of hard shoulders. The feature must be able to withstand accidental loading except in locations which are protected from direct traffic. The design should mitigate, as far as is reasonably possible, the effects on errant vehicles leaving the carriageway.”

51. He accepted that the advice was entirely appropriate, albeit given in 1999, although it was important to note that it was intended for permanent highway solutions, and one of the particular problems which it was addressing was that of stone scatter. Mr Till was at pains to state that there was no historic evidence of any vehicles running into the verge from the hard shoulder and losing control and whilst errant vehicles had never been considered to be a particular problem and there had never been a reason to question the former design, the new design was an improvement on previous best practice, and further provided a permanent solution going forward.

52. In relation to the question of placing cones as an additional safety feature, Mr Till believed that this created a problem in itself, if the cones were struck and flying about the motorway. If he was satisfied that the French drain had been hardened, particularly following the new design, he would not endorse the putting out of cones save where there were clear soft verges, when warning signs would also be appropriate.

53. Mr Till also told the court that in respect of the type X design in place prior to the accident, the upgrading of the verges which had French drains would have a depth of asphalt planings, which comprised recycled asphalt or bitumen (which had a tendency to bind together creating greater adhesion) of 200mm, and not the 150mm provided for in the design profile, thus creating an even better hardening effect.

54. The Defendant's third lay witness was Mr Christopher Thomas, now a traffic management manager, but at the time of the incident the traffic safety control officer (TSCO). His responsibility was to ensure the safety and efficient running of the TTM, the CCTV system, and the free vehicle recovery system. The role of the TSCO was described in the TMP. He had no specific input into the design of the French drain but was able to give informed evidence as to the various measures which were in place as component parts of the TTM, including lane widths, signage, the white line at the edge of the hard shoulder, and the setback from the verge, the verge level, steps taken for the hardening of the verge, and the use of barriers. In particular his evidence addressed the inspections of the TTM, and the key questions which are material to any consideration of the statutory defence. He produced a number of documents including key drawings, diagrams and schematic presentations for the TMP, and, significantly, the inspection sheets logging the inspections carried out by AI, the specialist subcontractors who undertook these. Mr Thomas described how vehicle run off when the hard shoulder was used was inevitable, bearing in mind the number of vehicles which were travelling through the works on a daily basis, and it was common to get tyre marks which would require rerolling, but significant depressions were less common. Broken down vehicles would often stop with wheels on the verge, but the regular inspections would pick up any issues, and be dealt with. Mr Thomas also told the court that there were regular traffic management clinics with the highway agency.

55. He believes that if the depression/gouge which had been depicted in the police photographs had been identified in the absence of an accident, which is highly likely from regular drive throughs and inspections, then it would have been attended to as either a category one or a category two defect, probably the latter, to be repaired within 24 hours and not as an emergency. These defects were defined in the TMP, with edge deterioration, being a category two defect, described as “*edge deterioration with abrupt level differences carriageway edge exceeding 100 mm size and location likely to cause loss of control.*” He did not believe that the edge here approached anything like 100 mm. It was customary for repairs to be carried out for anything above 80-100mm as a category one defect this was very uncommon, because the asphalt planing stood up very well.

56. Mr Thomas was cross-examined about risk assessments, which he accepted were not put into writing, but he is satisfied that all risks would have been considered at the time various stages of the TMP were put into place in a dynamic process. In particular, in relation to the filter drain, he believes that this would have addressed the close proximity to the running carriageway (the hard shoulder).

57. In respect of the HSE criticism that overruns were not recorded on any formal monitoring, and that the risks from filter drains were not included in a risk register, Mr Thomas believed that any risks would have been assessed at least dynamically. Further, whilst overruns were not recorded, nevertheless if a vehicle was recovered from the verge, or on the hard shoulder partially off the carriageway, and tyre marks had been identified which required attention, this was likely to be noted. However, it would not have been possible to record every vehicle that strayed onto the verge, which was likely to have been a regular occurrence.

58. Mr Thomas accepted that chapter 8 of TSM made it clear that a speed limit reduction to 50 miles an hour in itself was not sufficient, and the TTM should endeavour to achieve a level of safety equivalent to a non-works situation. He also accepted the delineation of the edge adjacent to the filter drain, namely the white line, was an important safety feature and he acknowledged that in some places the white lines may have been becoming worn or obliterated. If there were multiple areas of white line failure it is likely that a repair would be directed, but the aim was to have 70% clarity. If they had to be refreshed because they were distressed or missing, this may require temporary partial closure of the Lane, and he pointed out that the vehicle and machinery which created the line could not always guarantee that the distance between the nearside edge of the line and the edge of the concrete carriageway would be 200 mm, because the concrete edge itself was not even, being jagged and broken in places, and it would be impractical for the line to follow the edge. This would create confusion for drivers. Chapter 8 also imposed a requirement to deal with stone scatter.

59. He did not agree that the surface of the verge was “low” as it was described either by the police officer or in the Atkins report. This was unspecific, and he would expect the level to be lower than the adjacent carriageway in any event for the purposes of drainage and run-off. Any serious difference in depth would be treated.

60. Mr Thomas was surprised and disappointed at the suggestion that there might have been any contravention of health and safety law. He was confident that at all times the TMP had adhered to the minimum requirements of Chapter 8, and this was good practice. He did not understand the reference to “*potential vehicle stranding.*” in the HSE appendix.

61. When vehicles did stray from the hard shoulder onto the verge this may involve a little wobbling or rocking, but invariably (as was clear from constant monitoring of the motorway through the camera system) such vehicles would regain the carriageway without any difficulty. Accordingly he was satisfied that the verge was capable of withstanding such incidents and that no problem existed of the potential for loss of control, although if there was braking or heavy braking it is likely that this would have caused a rut within the filter drain material.

62. The Defendant’s final witness, Mr Kieran McGibbon, took over from Jerry Clark as the project director, thus with overall control of the motorway works. He provided a general overview of all the material and expressed his conclusion that he did not believe that the motorway, and in particular the accident location, represented any danger. He relied on a number of factors. These were; the 50 mph speed limit with good adherence, complying with the chapter 8 standards for lane widths and other aspects, the high volume of vehicles using the M25 throughout the entire period of the works without incident, the provision of the requisite signage, the white line demarcation with a clear additional demarcation represented by the dark asphalt planings of the verge, the hardening of the verge to appropriate depths of asphalt planings, and the lack of reports from any of the authorities about accidents or near misses, with constant monitoring from the CCTV control room for the entire period that the hard shoulder had been used as a temporary running lane (from August 2013).

63. Under cross-examination from counsel, Mr McGibbon referred to the constraints under which BBS was working, including the need to keep the motorway open with three lanes and maintain a 50 mile an hour speed limit, these being requirements by government policy for commercial reasons, and the limited space within which the necessary works could be undertaken, meaning narrower lanes. Whilst hard strips, such as those shown on the photographs of dual carriageways perhaps a metre wide would be ideal, this was impossible during temporary works. Half a metre might be expected on a motorway that was fully open, with a maximum operating speed limit of 70 miles an hour and all lanes in use. Further, shutting off one lane would have been a long and arduous process with contractual problems

leading to changing the methodology of the scheme and the commercial model, and carried with it different safety implications.

64. Mr McGibbon did not accept the criticism of the HSE that there had been a lacklustre approach, even if there may have been gaps in communication. He believed that they were working collaboratively, and came up with highly positive recommendations when consideration was given as to how there might be improvement. In any event, best practice had been followed in all respects.

Highways experts

65. The Claimant's highways expert was Mr Adrian Runacres who prepared his initial report in August 2021. Although he does not accept an expertise as an accident reconstructionist, Mr Runacres specialises in collision investigation, highway maintenance, road safety and forensic meteorology.

66. In his first report Mr Runacres emphasised the narrow nearside traffic lane (which he was accepting at the time based on the police evidence to be 3 m, and not 3.3 m) to have been a major contributing factor to the Scania truck running off the former hard shoulder and into the verge in respect of its nearside wheels. He believed that because the verge would be "relatively soft" and lower than the carriageway edge, the instinctive reaction of applying significant steering input, and over steering was typical in such circumstances, and was the principal cause of loss of control.

67. From Google Street view images which Mr Runacres had obtained in relation to the site in the year before the incident, he demonstrated that the verges in which the filter drains were positioned, although overgrown with vegetation, were largely level with the adjacent highway and also pointed out the white ribbed line which separated the then hard shoulder from the three other lanes.

68. Mr Runacres identified the guidance which would have been in force at the time in respect of the legal requirements both for the permanent designs of motorways and the temporary layouts during roadworks, the latter of course being chapter 8. He referred to a number of sections from chapter 8 which he relied upon to inform his overall opinion. It is common ground between the parties that the references are pertinent, and therefore I set out some of them below, and in particular those which were referred to during the course of the evidence.

69. The first part of chapter 8 which contain the design criteria include:

D1.4.2 Underlying the design of temporary traffic management arrangements should be the aim to produce a safety performance no worse than the rate for non-works conditions, whilst minimising delays for traffic passing the works or incident. The provisions within this Chapter are intended to achieve this aim. Health and Safety legislation imposes a duty upon designers to ensure that their temporary traffic management arrangements can be implemented, modified, maintained, and removed safely.

D3.3.1 On all roads, in order to provide the required lateral clearance, the running lane width may be reduced according to the expected type of usage. Where heavy vehicles, including public service vehicles, caravans etc. are expected, the lane width may be reduced to 3.25m (desirable minimum) or 3.0m (absolute minimum). Where two lanes are required for HGVs the near side lane should be 3.25m (absolute minimum).

D3.7.1 Works should be designed to minimise the risks to road users and the workforce. Having done so, implementation of a temporary mandatory speed limit should be considered, especially where the workforce is required to operate on the carriageway, or other vulnerable area.

D3.7.2 There may often be pressure for temporary speed limits, but it is important that their limitations as a protection to persons working on the site should be realised. Traffic speeds will inevitably be reduced where busy roads are severely obstructed, so a speed restriction may not be necessary. On dual carriageway roads, where works requiring protection are taking place within the central reservation or on the other carriageway, any protection necessary on the unobstructed carriageway should be given by means of coning rather than a speed limit.

D3.11.8 The edge of a carriageway without raised kerbs should be indicated by a 100 mm-wide continuous reflectorised white line to diagram 1012.1 with its near side edge placed approximately 200 mm from the actual edge of the carriageway. Where flush kerbs are provided, the edge line should be superimposed on the kerb.

D3.19.3 Edge protection and/or temporary widening may be needed as a temporary measure where lane widths are narrow, or where turning vehicles may cause over-run problems. If required, the designer should;design construction to withstand loading.....

70. The second part refers to operational factors:

O3.4.4 Where a filter drain or other soft material is adjacent to the edge of a hard shoulder being used as a running lane, and there is no kerbed protection, it should be hardened whenever possible as part of preliminary works, see Part 1: Design, Section D3.19. When this is not done, traffic cones should be placed on top of the filter drain/soft material with their bases touching the edge of the hard shoulder and spaced at approximately 18 m intervals. The back edge of the hard shoulder running lane should be marked with a 100 mm wide white thermoplastic line as specified in Part 1: Design, Section D3.19. An edge line and traffic cones should also be provided when there is a dished drainage channel adjacent to the edge of a trafficked lane.

71. In respect of the condition of the filter drain at the time that Mr Mirek's vehicle ran off the carriageway, Mr Runacres interpreted the photographs to indicate that the filter

material was “*heavily disturbed and eroded, with a profile that was highly indicative of this area verge having been subject to trafficking by the tyres of a considerable number of LGV’s over a period of time*”.

72. He concluded that there were four main factors why the condition of the temporary traffic layout was deficient, and that the design and condition created a far higher risk to safety than that posed by a permanent highway layout, a risk which was not identified by the Defendant. These were that the nearside lane was either 3 m (if the police officer was correct) or 3.25 m in width; that the carriageway edge line, which did not contain a raised rib, was heavily worn and positioned only 94 mm from the carriageway edge; the nearside verge and filter drain were at a significantly lower level than the adjacent carriageway; the filter drain media was not stable and had been heavily disturbed by other vehicle tyres.

73. He believed that the operation of a system of effective monitoring and inspection would have identified the disrepair of the filter drain and improve the levels, and if this could not have been achieved, a line of cones would have provided a visual cue to motorway users.

74. Mr Runacres provided a supplemental report after considering the Defendant’s witness evidence. He did not accept that the objective evidence supported the Defendant’s account that the significant difference in levels between the carriageway and the verge at the relevant section were caused or mainly caused by the single action of Mr Mirek in the operation of his HGV on the basis of the police photographs, which he sought to interpret by reference to the disturbance of the filter material, the erosion, and the groove and ridge. He maintained the view that this was a defect caused by multiple vehicles over a period of time which should have been identified by the Defendant on inspection, which would have led to a repair, and the levelling of the carriageway with the adjacent verge.

75. Mr Runacres was cross-examined by counsel for the Defendant. He was referred to a recent correction he had made to his report substituting the word “sub-base material” for “soil” at paragraph 3.39 and his insistence in the following paragraph that there would have been a vegetated verge between the edge of the motorway and the filter drain. This was not shown in the photographs, and he explained by reference to the cross section drawings, including that at B15, how the motorway edge was not completely vertical, demonstrated by the diagonal line in the drawing, whereas the filter drain was vertical, and the section between the motorway edge and the drain was what he referred to as the “verge”. It is likely that this would become vegetated in time, and when disturbed, it explained why there was a mixture of sub-base material and soil.

76. He was asked about his understanding of the section 41 repairing duty, and whether he accepted that many of his criticisms were not relevant to the issue of disrepair or a lack of

maintenance. Mr Runacres agreed that whilst this may have been the case, his role had been to look at the overall picture, including the features that gave rise to an increased risk and the steps which should have been taken in mitigation of that risk.

77. He accepted that in his written reports he had not provided any detail about the drain construction by reference to guidance or drawings, nor the expected height differential between the carriageway and the drain, and he was not able to say that this drain had been constructed in any way other than in accordance with the design standard which may have been best practice, although he believed that there was a duty on the part of the contractor to improve on best practice in appropriate circumstances.

78. Mr Runacres maintained his view that there had been an over-reliance on speed restriction as a safety measure, but accepted that when he had referred to paragraph D 3.7 of TSM in his report to support this, he had not dealt with the complete text of D3.7.2 or D3.7.8, which indicated that the guidance was directly concerned with the protection of the workforce, making reference to the provision of barriers in the central reservation, which had actually been in place in the contractor's works. He did not accept that he was being unfair, and had been primarily concerned with the nearside verge area.

79. Although he accepted that he had no expertise in accident reconstruction, Mr Runacres was prepared to venture an opinion about the effect of the verge on the actions of the truckdriver Mr Mirek and on the basis of the police photographs. He agreed that he had made no mention of braking in his original report, referring to the effect of steering only. Mr Runacres was taken to the depth measurements drawn from the data analysis in Mr Fidler's report, particularly those prior to police marker 3 which showed a maximum depth of 6 cm from the carriageway edge, but believed that the deeper ridges or grooves shown before marker 4, and the point where the vehicle left the verge were clearly implicated and it was this which caused the driver to brake and oversteer. He sought to demonstrate by reference to the various photographs how the subsoil disturbance showed evidence of previous tyre marks other than those of the tractor or trailer driven by Mr Mirek. He had not examined the tachographs, and had no expertise in their analysis, but accepted the data of Mr Fidler.

80. Addressing the suggestion that it was purely coincidental that all other drivers might have chosen to brake and oversteer at the same point when there was no evidence of any disturbance prior to marker 3, where any difference in level did not require intervention, Mr Runacres posited the theory that the impending approach of the barrier may well have caused others to react in exactly the same manner as Mr Mirek. However, he accepted his theory that the shape and depth of the rut/groove having been caused by other vehicles was not advanced in either of his reports. He also accepted the evidence of Mr Fidler that all five nearside wheels, save for the inner wheel on the tractor driving axle, were capable of tracking into the verge, and therefore a number of different tyre impressions might have been expected.

Further, he agreed that the effect of the concrete supports for the barrier stanchions might have impacted on both hardening the subsoil and the extent to which a rut or groove which was not even had been created.

81. Mr Runacres was questioned about his criticism of the white line marking, and agreed that a 70% standard was appropriate, allowing for some deterioration with the passage of time, although it was not clear what might have constituted a defect. It was relevant, however, that this was a temporary situation which might have required greater mitigation measures. He maintained his criticism about the gap between the nearside edge of the white line, which was required by the guidance to be 200 mm, and at times as indicated in the police evidence, and the analysis of Mr Fidler it was little more than 90 mm, drawing drivers even closer to the verge.

82. Mr Runacres agreed with counsel that he was not contending that the verge was in a state of disrepair because it was not fit for purpose if it followed the best practice design, although it should have been capable of withstanding emergency braking. If not, cones could have been used, although he accepted that this carried with it additional safety implications. Essentially this dispute, agreed Mr Runacres, was about the existence or otherwise of the rut.

83. He did not agree that chapter 5 of TSM, as relied upon by Mr Dixon, had any relevance to the situation which prevailed here, because it was clearly directed at permanent works.

84. The Defendant's highway expert was Mr Dixon who provided a substantive report, as well as engaging with the Claimant's expert in a joint report. It is significant that at the time of preparing his evidence, he had the benefit of the detailed analysis from the reconstruction expert, Mr Fidler.

85. He addressed the criticisms in the Particulars of Claim in the context of highway maintenance and section 41. He was satisfied that the police measurements in relation to the nearside lane (former hard shoulder) were not accurate, and that Mr Fidler's measurement of approximately 3.3 m was to be preferred. By reference to the prevailing highways agency design standard details for both the permanent and temporary construction of the verge and the drainage system, and in particular the need for hardening to address both stone scatter and the possibility of vehicle run-off, he was satisfied that the verge at the location was properly overlaid with asphalt planings, and that the construction appeared to be both reasonable and compliant, although he was unable to comment on its ability to withstand vehicle loading.

86. However, he did not believe that there was any evidence that the vehicle driven by Mr Mirek had sunk in to the filter drain prior to the point that is shown in the photographs. Further, he was unable to accept that the damage had been caused by multiple vehicles. In respect of the interpretation of the police data, he largely deferred to the analysis of Mr Fidler.

87. Mr Dixon did not believe that there was a need for a nearside hard strip between the hard shoulder and the verge in a temporary traffic management situation. Although he accepted that chapter 5 of TSM was pertinent for permanent carriageway arrangements, when dealing with the road markings, and the 200 mm requirement for the nearside edge of the 100 mm white line, it did contain some guidance for a smaller space/gap in temporary situations applicable to the provision of contraflow which may have justified the 100 mm, which appears to have been the placement of the marking in this case. He did not regard it as unreasonable.

88. In respect of the suggestion that the verge was at a lower level than the adjacent carriageway made in particular by the police officer, again Mr Dixon referred to the measurements provided by Mr Fidler and the role which Mr Mirek's vehicle is likely to have played in disturbing the verge material.

89. Mr Dixon was cross-examined by counsel for the Claimant. He accepted that whilst the visible evidence of vehicle tracks in the verge had been assessed by him to be 54 m before Mr Mirek's vehicle re-entered the carriageway, on the basis of both Mr Fidler's evidence and the account provided by Mr Mirek himself, it would not be unreasonable that the vehicle had been overrunning into the verge for a distance of about 100 m. During this time he would have been braking as well as steering.

90. Whilst the photographs of the accident locus taken from the Google Street view in 2015 with the works completed revealed a 1 m hard strip and a ribbed white line, Mr Dixon made two points. First of all he considered that the wider hard strip demonstrated in excess of the usual 500mm might have been for drainage. Second, he believed that the temporary works in 2013 justified a very tight arrangement largely addressed by speed reduction and it was noteworthy that the accident rate for this stretch of motorway had been 50% less than that which prevailed prior to the accident.

91. He was asked why when dealing with the design guidance for the construction of the drain in paragraph 3.19 of his report he had not included paragraph 2.1,¹¹ which addressed the need to withstand accidental loading and mitigate the effects of errant vehicles leaving the

¹¹ HA 83/89 (Volume 4, section 2 – bundle B306)

highway, and explained that he had been intending to highlight references relating to stone scatter, but accepted that this would be pertinent for filter drains, and that paragraph 3.1 from the same source which he had quoted dealt with the overrun liability if the surface drain was close to the hard shoulder.

92. Mr Dixon did not accept that the heaviest wheel tonnage which he described in paragraph 3.30 of his report, 4.25 to 5.25 tonnes, would have compressed the verge material which was in any event pre-compressed with the use of machinery. Sinking had not been described by the driver in his police interview and in his statement, so much as being pulled to the left.

93. He accepted that it would be common to get tyre marks on the verge, but this would not be suggestive of softness caused by compression, so much as abrading and displacing .

96. Mr Dixon was asked a number of questions about level differences between the carriageway and the verge suggestive of a step, and whilst he agreed that the photographs showed a shadowing which made it difficult to determine, he did not accept that there was a step, so much as a lip. In any event, he could not comment on whether the difference was likely to trap a steering wheel, and deferred to the evidence of Mr Fidler for level differences. Whilst he had commented on the likely routine inspection which would have picked up significant level differences at paragraph 3.39 of his report, he had not seen a single reference to a disturbed verge, suggesting that this was an extremely rare occurrence.

97. Insofar as he had made reference in his report to chapter 5 guidance for permanent highway layouts, he was not suggesting that this entitled the design of the TTM to ignore chapter 8, but it was an indication that in very tight situations a 50 mm gap may have been justified between the white line and the edge of the carriageway.

98. He accepted that there had been no risk assessments put into writing in relation to the verge construction and the hard shoulder detail. In relation to the risk that heavy braking and steering might be expected, and the impact this would have on the drainage material, he acknowledged that this was a reasonable expectation.

99. Mr Paul Fidler was a key expert witness. He describes himself as a physicist and qualified collision investigator, and his report contained a significant amount of technical mathematical analysis. Happily for those not possessed of the same arithmetical dexterity, his calculations were not challenged, and the focus for the most part was on his conclusions which drew on the police laser data and the tachograph. Like the other witnesses, Mr Fidler did not attend the accident locus.

100. He noted the reconstruction report provided by PC Gladstone and the physical evidence of marks on the road surface which informed many of his own conclusions. These included a scratch mark to the Armco barrier, six tyre marks of differing shapes and sizes which were measured from the 18 different yellow police markers which had been put in place, two gouge marks and two scrape marks. He observed that the photographs taken by the officer began approximately 140 m from the resting position of the vehicle and 15 m east of yellow marker 1.

101. Whilst tachograph analysis was acknowledged from the officer, particularly in relation to the minutes leading up to the accident, Mr Fidler extracted his own data conclusions, some of which were inconsistent with those of PC Gladstone. He pointed out that the data provided from the vehicle in isolation showed the vehicle speed as a function of time, but could not show where any braking began.

102. In particular bearing in mind the loss of control, speed, acceleration and distance could not be reliably obtained in the final seconds before the vehicle came to a stop. The measurements for speed are expressed for the most part as m/s (metres per second) and for deceleration as a negative entity, i.e. -2 m/s/s (metres per second squared).

103. The primary conclusions are these. Approaching the accident site the vehicle was travelling at 23.6 m/s which equates to 52.8 mph, before reducing its speed at 9.14:18.25s. This was 44.25 seconds.¹² The initial rate of braking was -1 m/s/s which was consistent with simply easing off the throttle, but it increased to -2.2 m/s/s at 46.25 seconds before peaking at -8.9 m/s/s at 46.75 seconds (briefly) then decreasing but averaging at -3.8 m/s/s between 47 seconds and 49.25 seconds. There was a further and greater peak at 49.75 seconds at -14.4 m/s/s before rapidly reducing to between 0 and -1 m/s/s over the next few seconds.

104. Mr Fidler concludes that after 9.14: 18.25 there was a speed reduction from 53 mph to 8 mph during which there was maximum or emergency braking with the ABS system. Emergency braking with ABS would not be expected to leave any locked wheel tyre marks on a normal road surface and would maintain directional control, although faint marks could be left when the wheels come close to locking. Applying the deceleration data to the physical evidence from the scene, and noting that the marks or groups in the verge begin after police yellow marker 3, Mr Fidler surmises that if the displacement of the verge material was caused by the Scania truck, it must have entered the verge prior to that marker to allow for a lead-in. From his scaled computerised model of the wheels of the Scania, using the police laser

¹² The time is expressed from 42 seconds to just over 57 seconds in the graphical presentations presented by Mr Fidler at figures 1 and 2 in his report, which it is assumed is based upon the extrapolated time data from the tachograph, with 57 seconds being the time that the prop shaft stopped rotating (when the vehicle came to a stop) and the time given of 9:14:18.25 is 44.25 seconds. It is easier to understand the data by reference to the seconds quotient.

measurements, and by reference to the commencement of the fresh disturbed material, he is of the opinion that at marker 3 the Scania was under emergency braking, and at this point the nearside wheels would have been skidding because of the differential in coefficients of friction between the concrete road surface and the loose verge material. He believes that when the wheels were not under emergency braking there would not have been any displacement of verge material and that beyond marker 3 the greater disturbance is consistent with the point of peak braking. He is unable to say which of the nearside tyres was responsible, but by reference to the tyre marks on the road caused by the front offside wheel, in conjunction with the tyre marks in the verge, he believes that Mr Mirek would have begun to steer to the right a short distance before marker 4, insofar as it would have taken a short period for the vehicle to respond. The second peak in braking probably occurred, according to Mr Fidler, when the offside wheel lifted off the ground, with the nearside wheel/s still skidding in the verge.

105. As indicated above, a further and significant finding from the police laser measurements is that the nearside lane (hard shoulder) was 3.3 m (plus or minus .03 m) wide.

106. With the use of the computer model, and the measurements of the wheel compared to the verge, Mr Fidler opines that the nearside wheels, save for the front tractor single nearside wheel, were never completely in the verge, and remained partly on the carriageway. To demonstrate this, he provided a diagram showing the overlap. This is considered in conjunction with his conclusions about the data from the police scanner which enables Mr Fidler to calculate the depth of the verge/drain at relative distances before police marker 3, when the depth of the drain is measured at 7 cm. He also concluded that the at approximately 40 m before marker 3 the depth would have been 4 cm with data extrapolated for every 10 m thereafter.

107. His overall conclusion is that in the absence of any freshly disturbed drain surface material prior to marker 3, but with the unlikelihood of the vehicle suddenly entering the verge beyond that point, the most likely scenario is that it had travelled in the verge over a measurable distance at a speed in excess of 50 mph until shortly before marker 3, when the driver began to apply emergency braking. It may have been the upcoming crash barrier which caused Mr Merrick to react in this way and he noted that the barrier had sustained a shallow glancing contact. If there had not been a braking and significant steering to the right, it is likely that the vehicle would have remained in the verge. Mr Fidler accepts, however, that an interpretation of his data is a matter for the court.

108. In the joint discussions with Mr Runacres (these experts did not share like disciplines) there was substantial agreement as to the extrapolation from the data by Mr Fidler, but it was accepted that there was a limitation on the laser scan data which might explain the inconsistency in the appearance from the photographs depicting a lip or a ridge between the

carriageway and the drain/verge which could have been caused by laser shadow. However, the survey data at the bottom of the rut was largely consistent in appearance with the photographs.

109. When questioned by counsel for the Claimant, Mr Fidler emphasised that between 46 and 47 seconds was the onset of hard braking, accepting that prior to this point the braking rate was likely to have been very low. He referred to table 1 of his report. The Scania was capable of braking at minus 5m/s/s and there is no doubt that if the vehicle had remained on the carriageway the braking would have been increased. He did not accept that the ABS would necessarily have caused a feeling of the vehicle moving to the left for the driver, because it was designed to prevent this effect, although there might have been a degree of tilting. The driver could have been describing the sensation of leaving the highway. He was satisfied that his analysis was consistent with the driver, as he had stated himself, having been off the carriageway for at least 100 m. He was unable to say that leaving the carriageway was caused by a gradual drifting or significant steering input.

110. Mr Fidler was taken to several of the police photographs when asked about the steering which may have caused the vehicle to leave the verge, and was satisfied that harsh steering is likely to have been applied at a point indicated on photograph B266 just short of police marker 4.

111. He accepted that the profile of the police scan did not give an exact representation of the depth immediately adjacent to the edge of the carriageway. However, even if the level differential had caused a problem with handling, this could not have occurred before police marker 3 when the vehicle was probably travelling in a straight line. The impression of the vehicle jumping about may well have been a vehicle shuddering or shaking because of resistive material after the heavy braking had begun and the verge material was being displaced, possibly caused by the absence of uniform resistance to the material if there had been concrete footings for the barrier posts.

112. Mr Fidler accepted that there was a variation in the depth of the rut between 3 and 6 cm prior to police marker post 3 but pointed out, with reference to his diagrammatic representation of the tyres in the verge, that this would only have represented some 2 to 3% of the diameter of the tyres which is unlikely to have affected vehicle handling unless the material had been particularly soft.

The Law

113. This claim for a contribution is pursued on a very narrow basis. Reliance is placed on section 41 of the Highways Act 1980, as indicated. The text of the statutory provision relating to the duty to maintain is short and succinct and reads:

41 Duty to maintain highways maintainable at public expense.

(1) The authority who are for the time being the highway authority for a highway maintainable at the public expense are under a duty, subject to subsections (2) and (4) below, to maintain the highway.

114. Subsections (2) and (4) are not relevant. There is no issue but the Highways Agency is the relevant highway authority, and that whilst responsibility for maintenance and repair cannot be delegated to the second Defendant, in whose shoes have been standing BBS, for the purposes of this case, the second Defendant should be treated as the highway authority.¹³

115. Section 41 needs to be read in conjunction with section 58, the statutory defence, but which provides a wider ambit to the scope of the duty and defines what is required, although the application of the defence will not be considered unless it can be shown that the highway itself is in a state of disrepair.

58 Special defence in action against a highway authority for damages for non-repair of highway.

(1) In an action against a highway authority in respect of damage resulting from their failure to maintain a highway maintainable at the public expense it is a defence (without prejudice to any other defence or the application of the law relating to contributory negligence) to prove that the authority had taken such care as in all the circumstances was reasonably required to secure that the part of the highway to which the action relates was not dangerous for traffic.

(2) For the purposes of a defence under subsection (1) above, the court shall in particular have regard to the following matters:—

- (a) the character of the highway, and the traffic which was reasonably to be expected to use it;
- (b) the standard of maintenance appropriate for a highway of that character and used by such traffic;
- (c) the state of repair in which a reasonable person would have expected to find the highway;

¹³ This is based upon contractual indemnity and pragmatism and avoids disproportionate litigation.

(d) whether the highway authority knew, or could reasonably have been expected to know, that the condition of the part of the highway to which the action relates was likely to cause danger to users of the highway;

(e) where the highway authority could not reasonably have been expected to repair that part of the highway before the cause of action arose, what warning notices of its condition had been displayed;

but for the purposes of such a defence it is not relevant to prove that the highway authority had arranged for a competent person to carry out or supervise the maintenance of the part of the highway to which the action relates unless it is also proved that the authority had given him proper instructions with regard to the maintenance of the highway and that he had carried out the instructions.

116. Thus concepts of dangerousness, reasonable expectation of knowledge, and likelihood of danger are utilised to determine the standard expected of the highway authority. These concepts have been the subject of extensive case law over many years.

117. Once it is established that a defect in the highway which is dangerous has caused the damage, this is then considered to be an “actionable defect” without the need for any further proof by a Claimant, because the old rule of law which absolved a highway authority from liability for non-feasance was abolished with the first incarnation of the Highways Act in 1959. The burden then shifts to the highway authority to show that it has taken such care as was reasonable in all the circumstances by reference to the factors in subsection 2. If there is no actionable defect, in the sense that the highway is in repair and no danger is present, then the question of the statutory defence does not arise. Both counsel have referred to various extracts of case law to support their respective arguments, but for now I set out some simple and basic propositions supported by authority.

118. Whilst the duty to maintain and repair is an absolute one, there is an objective approach to the standard of care that is required. A highway authority is not obliged to repair any defect which might arise, nor is foreseeability of harm a measure of the standard. The most helpful statement relating to the standard was provided by Laws LJ in **Jones v Rhondda Cynon Taff CBC** [2008] EWCA Civ 1497 at Paragraph 12:

“Section 41 has been said to impose an absolute duty, but the term “absolute” in my opinion has with respect to be treated with care. There is a risk of it suggesting that the duty is to maintain the highway to such a standard as in effect to guarantee the safety of its users, and it is plain that that is by no means the measure of the duty; it is absolute only in the sense that it is not merely a duty to take reasonable care but to maintain the highway to an objective standard. The statute does not state what the standard is. The authorities, however, are as it seems to me clear as to the nature of this standard. The highway has to be maintained in such a state of repair that it is reasonably passable for the ordinary traffic of the neighbourhood without danger caused by its physical condition. See Griffiths v Liverpool Corporation [1967] QB 376 at 389 F-G, Goodes v East Sussex County Council [2000] 1 WLR 1356 at 1361 F-H. Compare Mills v Barnsley Metropolitan Borough Council [1992] PIQR 291 at 293. And

Mr Lewis QC this morning has referred also to Cenet v Wirral Metropolitan Borough Council [2008] EWHC 1407 at paragraph 27 where, citing Rider v Rider [1993] 1 QB 505 at 514, Swift J stated that the highway must be "free of danger to all users who use the highway in a way normally expected of them".

119. The duty owed to the ordinary or normal users of the highway and in that sense there is an objective element provided, which does not focus on foreseeability of harm, that which might be expected in the reasonable anticipation of the authority. This is clear from the judgment of Steyn LJ at paragraph 16 in **Mills v Barnsley** [1992] PIQR P289:

“In order for a plaintiff to succeed against a highway authority in a claim for personal injury for failure to maintain or repair the highway, the plaintiff must prove that: the highway was in such a condition that it was dangerous to traffic or pedestrians in the sense that in the ordinary course of human affairs danger may reasonably have been anticipated from its continued use by the public; the dangerous condition was created by the failure to maintain or repair the highway; the injury or damage resulted from such a failure.”

120. In **Rider v Rider** [1973] 2 WLR 190, which was referred to by both counsel and concerned a not dissimilar defective road edge which caused a vehicle to lose control, Sachs LJ considered the “normal user”.

“Having considered the authorities cited to Stirling J. and in this court, it is in my judgment clear that the corporation's statutory duty under section 44 of the Act of 1959 is reasonably to maintain and repair the highway so that it is free of danger to all users who use that highway in the way normally to be expected of them - taking account, of course, of the traffic reasonably to be expected on the particular highway. Motorists who thus use the highway, and to whom a duty is owed, are not to be expected by the authority all to be model drivers. Drivers in general are liable to make mistakes, including some rated as negligent by the courts, without being merely for that reason stigmatised as unreasonable or abnormal drivers; some drivers may be inexperienced, and some drivers may find themselves in difficulties from which the more adept could escape. The highway authority must provide not merely for model drivers, but for the normal run of drivers to be found on their highways, and that includes those who make the mistakes which experience and common sense teaches are likely to occur. In these days, when the number and speed of vehicles on the roads is continually mounting and the potential results of accidents due to disrepair are increasingly serious, any other rule would become more and more contrary to the public interest.

In every case it is a question of fact and degree whether any particular state of disrepair entails danger to traffic being driven in the way normally expected on that highway. The test is an objective one. To define that degree by using words or phrases suited to a particular case can end by putting an unwarranted gloss on the duty.”¹⁴

121. The duty to maintain the highway under section 41 is limited to the structure and fabric, and does not extend to road signs, street furniture such as warning cones or barriers, or extraneous matter on the surface. (See **Valentine v Transport for London & Another** [2010] EWCA Civ 1358) It does, however, include the subsurface and drains.

¹⁴ My underlined emphasis

122. It is against this relatively uncontroversial legal background that I now consider the respective submissions of counsel.

Respective submissions

Claimant

123. On behalf of the Claimant, Mr Prynne QC began his submissions by disagreeing with the Defendant's contention that the design of the highway, and the juxtaposition of the drainage verge with the running hard shoulder was outside the section 41 obligation of the highway authority. It was necessary to consider the whole of the M25 and the roadworks which had been intended to create ARR with the TTM. The reduced width of the carriageway, he submitted, allowed HGVs to run alongside the filter drain and this created a new danger at the time of the TTM which had not previously existed, and which did not exist after the permanent construction, because of the hard strip that had later been created. The road users who had to be considered were those working on the central reservation and the danger or hazard related to the whole arrangement. This was a danger which had been created by the highway authority and had not been addressed, and it was a matter which fell fairly and squarely within section 41. It would be wrong to suggest that the TTM fell outside the scope as it clearly affected the structure and fabric of the highway.

124. It was also pertinent that because the scheme raised new risks and potential dangers it needed to be carefully assessed, and risk assessments were not irrelevant as was being suggested. It was insufficient for the Defendant simply to rely upon a standard practice and to contend that this was a good enough solution when there was a real possibility of a catastrophic accident using a narrow hard shoulder. It was submitted that the Defendant had accepted that the design was not capable of withstanding heavy braking and sharp turning. Where a workplace was involved, the section 41 objective standard, submitted Mr Prynne, should be informed by a standard of reducing the risk to a level "as low as reasonably practicable" and in this sense risk assessments were highly relevant.

125. Mr Prynne agreed that this court should address the happening of the accident in the first place, but that this was easily answered by reference to a finding that Mr Mirek had drifted into the filter lane and the effect of this was that he found it difficult to handle his vehicle, and in so doing inevitably displaced the planings. He submitted that it was unnecessary to determine what was there before, and the focus could be the state of the filter drain and its inadequacy. Further, there is clear evidence of the state of the filter drain before marker 3 indicating that it was at a lower level than the carriageway, (and immediately adjacent to the running lane) factors which should be considered in conjunction with the asphalt planings which could not withstand the evasive action taken by the driver. He

accepted that many other HGV drivers might have reacted differently to Mr Mirek, but that was irrelevant, and his actions clearly fell within the range of normal usage.

126. In relation to the causal connection between the filter drain and the accident, that is the loss of control of the truck, Mr Prynne submitted that this was a “no-brainer” (in his terminology). The third question to address was then whether it was a danger to normal road users. In this respect he submitted that a risk assessment would have identified the danger and the possibility of an accident being predictable, and there was no evidence that anyone ever considered the raised risk in what was a tight scheme. The foreseeability or predictability arose in the context of HGVs drifting into the filter lane, the filter lane material becoming displaced, the sharp braking of a driver in such circumstances, and the loss of control giving rise to a very serious accident. Measured objectively the drain was therefore causatively dangerous and the danger did relate to the fabric and structure of the highway. He invited the court to consider various concessions made by the Defendant’s witnesses that the design was capable of improvement and that the original design had never been questioned as to its adequacy despite the knowledge of errant vehicles, and urged caution against a standard that was applied by reference to the absence of any previous accident in the context of a very high risk, as appeared to be suggested by Mr McGibbon.

127. In the event that the court considered the defence under section 58, Mr Prynne submitted that the highway authority’s culpability arose from systemic failure to consider a number of important features, but acknowledged that in terms of causative potency the driver was more to blame. Ultimately, however, this was a matter for the court’s discretion.

Defendant

128. Mr Weitzman QC on behalf of the Defendant submitted at the outset that it was wrong for there to be a focus on section 2 (1) of the Health and Safety at Work Act 1974 which as a matter of law had no application to the present situation. The Claimant was in effect seeking to impose a duty from *omission*, (that is by not taking a number of steps to address the safety of workers and other road users to keep vehicles away from the French drain) as opposed to alleging an act of misfeasance. Whilst section 41 of the Highways Act imposed a duty to correct an omission and created a liability for nonfeasance, it did not impose the positive duty which the Claimant was contending for.

129. He referred to a number of cases which made it clear that the statutory duty was limited to the maintenance and repair of the physical fabric of the road excluding signage and transient obstructions. The principles established in cases such as **Valentine** (*supra*) and **Gorringe v Calderdale [2004] WL 960935** (concerned with the erection of a warning sign) applied to exclude a responsibility for some of the steps contended for by the Claimant, including white line marking, ribbed lines, soft verge signs and traffic cones. The construction of the French drain was a matter of design and it could not give rise to any

liability simply because it may have presented a risk or a danger to vehicles on the hard shoulder running lane (and in consequence motorway workers) in the absence of a want of maintenance or repair.

130. Mr Weitzman referred to several other authorities which clarified the immateriality of a greater risk, including **Jones** (*supra*) and **Griffiths v Liverpool Corporation [1967] 1QB 374**, the latter case emphasising the ordinary user of the highway, when considering the absolute duty. The highway did not have to be perfect. Questions of foreseeability did not arise, but it was necessary to ask whether the usage had led to the accident. Reference was made to the fact that 60,000 vehicles a day had used this motorway since 2009, including a significant period when running on the hard shoulder.

131. An important issue for the court was whether or not an objective reasonable standard had been followed in relation to the construction of the drain and factors which should be taken into account were that an acceptable and approved design (B15) had been followed with the use of graded asphalt planings to a more increased depth than that provided for, which was best practice, and that the material had been properly compacted to create a hardened surface. Whilst it was accepted that vehicles would overrun from the hard shoulder with tyre marks noted occasionally, the exact frequency of this could not be established. It was inappropriate to place any reliance on the Atkins report, as the Claimant sought to do, in respect of an accident the day before because this was of a completely different nature.

132. Insofar as the Claimant may have sought to say that the difference in level between the carriageway and the verge amounted to disrepair, Mr Weitzman relied upon the analysis of the data provided by Mr Fidler over a length of 110 m, which was agreed by Mr Runacres, where apart from the area that had been churned up by the vehicle wheels, there was no “precipice” as such created with the carriageway and any disparities were insufficient to amount to disrepair. The Claimant’s expert had accepted that the 6 cm between markers 1 and 3 did not meet an intervention level.

133. It was submitted that in relation to the trough/rut depicted in the photographs it was necessary to ask how did this appear, and what was the state prior to the running off by Mr Mirek. He urged caution in relying upon the hearsay evidence of Mr Mirek which could not be challenged. However, it was noteworthy that in the course of his police interview he had sought to attribute a reason for coming off the road as being pulled to the left which suggested that he was avoiding an admission of not concentrating. The unchallenged evidence was that the emergency braking had caused the vehicle to sink into the drain and this was something specifically not mentioned by the driver. In the circumstances, no real reliance could be placed upon his evidence in respect of accident causation, or the state of the verge, and the effect of his driving upon it, whereas the primary evidence should be considered to be that of Mr Fidler which afforded an inescapable conclusion that the lorry

had braked heavily at a point beyond marker 3. This suggested that the drain was perfectly capable of withstanding the weight of a heavy laden vehicle until such a significant event, when the nearside wheels had been in the verge for some distance.

134. In respect of the evidence of Mr Runacres, Mr Weitzman pointed out a number of deficiencies in his original report which suggested a blinkered approach. He had not acknowledged that the damage to the drain could have been caused by Mr Mirek, failing to even mention braking. He did not take into account the difference in the widths of the wheels, and the fact that differential markings would be created as they ran along the track of the verge, including the significance of the concrete footings of the metal barrier stanchions.

135. Insofar as the Claimant's case depended upon an assertion that the filter drain was not sufficiently robust for braking and sharp turning, this was a criticism of design, which was based on best practice anyway, and could not arise from disrepair. It was irrelevant that subsequently improvements had been made, and steps were followed to prevent a recurrence, submitted Mr Weitzman, and this did not amount to an admission of previous disrepair. The Claimant's case appeared to be based upon a requirement for hardening of the filter drain to prevent braking effects, which otherwise left the drain in a state of disrepair, appeared to use reasonable foreseeability as a yardstick of the duty, as opposed to the objective standard of normal use. Noting that there were several cases in the authorities bundle where overrunning by motorists was considered to have been caused by the state of the highway, those cases all involved significant defects in the carriageway, and here the Claimant was contending for a standard which would have taken the duty far beyond addressing normal use, requiring wholesale change up and down the country.

136. In relation to risk assessments, or the absence thereof, seemingly relied upon by the Claimant, it is difficult to know, he submitted, what such an assessment would have identified in any event. The Defendant was clearly following best practice, and the evidence should be accepted that dynamic risk assessments were carried out on a continuous basis.

137. Mr Weitzman QC accepted that this case turned upon the issue of disrepair and section 41. If the court were to find that the state of the highway had been such as depicted in the photographs and that this had not been caused by Mr Mirek's wagon, but was causative of his loss of control, despite the evidence of regular inspection, bearing in mind the Defendant's evidence that there were four hourly patrols, it would be difficult to rely upon the section 58 defence as such a defect was clearly overlooked.

138. If there were to be an apportionment, he invited the court to consider that substantial blameworthiness and causative potency in relation to his steering and braking should be

attributed to Mr Mirek, with a relatively small attribution to the Defendant, bearing in mind the unchallenged evidence of following best practice.

Discussion

139. At paragraph 7 above I identified the discrete issues which fall to be addressed for a determination of the potential section 41 liability of the highway authority. They are: (a) what was the cause of this accident, and the loss of control of the articulated vehicle; (b) insofar as the filter drain or the verge was implicated causally, what was the state of the filter drain at the time of loss of control; (c) did that condition amount to a want of repair, danger or trap so as to give rise to a potential breach of duty under section 41; (d) if so is there a defence available to the highway authority (or here the party who has assumed by delegation the responsibilities of the highway authority, BBS) under section 58; (e) if not in what proportion should blame be attributed between the Claimant and the Defendant for the accident which befell Mr Maier, having regard to respective culpability and causation?

140. Of course the issues at (d) and (e) only arise if causation and an actionable defect are established. Otherwise, it is helpful to follow this template for the purposes of my determination.

141. As a starting point, and addressing the least controversial aspect of the evidence, there is little doubt that the trough (or rut as it has been described) as observed post-accident and depicted from police marker 3 to the point where tyre marks suggest that the vehicle began to veer across the road and its nearside wheels probably left the verge, would have represented a state of disrepair and an identifiable danger or trap for road users whose nearside wheels were likely to encounter the trough with only minimal overrunning. Further, it does not appear to be in dispute that the likely mechanism involved in the accident was the effect of the verge material (the asphalt planings and any subsoil or other material underneath the upper layer) on the nearside wheels of the Scania as it strayed from the highway and the driver applied emergency braking and excessive steering in an attempt to leave the verge and regain the carriageway. It was this process that caused the vehicle to overturn to its nearside.

142. Therefore, on the face of it, issue (a) would be capable of easy resolution as would causation per se, and the focus would have to be on whether or not the driver entered a verge which was already in that state, or whether it was created by the effect of the nearside wheels. In either respect there is a clear and obvious explanation for the loss of control, but if I were to find it was the effect of the wheels as opposed to the pre-existing state then the matter becomes more nuanced.

143. However, the process of resolving this question has been compounded by what seems to me to be a significant change in the emphasis of alleged culpability pursued by the Claimant. In the comprehensive Particulars of Claim which pleads many of the allegations pursued in this trial, the headline assertions appear to be in paragraph 8 where a number of matters are relied upon.

144. In particular at 8(h) reference is made to a “soft verge” to which the nearside traffic had access, and in 8(i) it is alleged that the verge was made up of material covering a filter drain which before this accident had been “overrun” by other traffic. There is a further qualifying allegation at 8(j) which refers to the lower level of the verge and the adjacent carriageway. These are key averments and it could not be challenged but that they touch upon the physical fabric of the highway and do not raise any question of design, warning sign etc.

145. The pursuit of this as a primary case by the Claimant was confirmed in the expert evidence of Mr Runacres. Although he did not address shortcomings in the context of the legal implications of section 41, nevertheless the instability of the filter drain having been overrun by a number of other vehicles was seemingly the main plank of his criticism. Despite the fact that the trough appeared to commence suddenly after marker 3, he stood by the position which he had adopted in both his expert reports that this was damage created by multiple vehicles. He agreed in cross-examination that the dispute was about whether or not the rut was pre-existing, and thus should have been detected by the highway authority, or its agent, on routine inspection. It was noteworthy that he sought to expand on this position by identifying certain features on the photographs which he believed provided evidence of previous overrunning.

146. Notwithstanding this primary case, not only was there limited cross examination of the Defendant’s experts, and in particular Mr Fidler, by Mr Prynne QC to support Mr Runacres’ position, in his closing submissions counsel did not seek to advance a positive case of a pre-existing clearly defective condition by reason of the presence of gouging or a rut caused by several vehicles overrunning. In fact he made his own primary argument that there was a significantly wider scope to section 41, which incorporated a design in the context of temporary roadworks the adequacy of which had to be addressed, conceding: *“That it was unnecessary to determine what was there before, and the focus should be the state of the filter drain and its inadequacy.”*

147. This apparent concession, and rowing back from a central plank of the pleaded case and Mr Runacres’ main criticism, does not surprise me and in the circumstances was sensible. The analysis of Mr Fidler was far more in-depth, because it was based upon an interpretation of the physics and the data than that which had been carried out by Mr Runacres, or even Mr Dixon, and provided clear evidence of the point at which the Scania must have started braking, and where it left the verge and regained the carriageway, albeit out of control.

Further, his computer generated images and the measurements of the width of the wheels in comparison with the verge, and the extent to which the verge was lower than the carriageway provided a far more exacting and scientific representation of level differences.

148. I found Mr Fidler to be an impressive and compelling witness who was unshakeable when questioned on his methodology. He was able to explain why there might have been variations in the shape and depth of the rut, in particular with a widening of the gouge when the nearside front steering wheel was turned, as allowance was made for the fact that not all nearside wheels would have been evenly within the verge area. On the other hand, Mr Runacres appeared at times to be clutching at straws, admitting that he had no real expertise in accident reconstruction, and seeking to justify the position which he had adopted about pre-existing damage to the verge which had been overrun by many vehicles, without any real logic.

149. Accordingly, when approaching the question as to whether or not the trough/rut pre-existed and was thus causative of the loss of control even though not enthusiastically pursued by the Claimant and his legal team in evidence or argument, I have little difficulty in coming to the conclusion that the damage demonstrated in the photographs, and in particular between markers 3 and 4, was caused substantially if not solely by the actions of Mr Mirek in braking excessively and turning sharply to the right. I find on a balance of probabilities that whilst there may have been overrunning by an occasional errant vehicle on previous occasions this had caused no notable damage to the verge which had withstood such actions and had remained intact, as indicated by the photographic evidence of the asphalt plainings substantially in place, and not displaced until the point at which it is highly likely that Mr Mirek began to brake excessively. A further compelling reason for coming to this conclusion is that it would be an extraordinary coincidence that errant vehicles were all overrunning in the same place so as to cause a sudden and notable variation in the depth of the filter drain.

150. Although questions of system would normally arise when considering the statutory defence under section 58, there is relevant evidence of an efficient system of regular inspection which has not been challenged or undermined. There would be a drive past inspection taking into account the hard shoulder and the verge at four hourly intervals, and in my judgment it is highly likely that if the verge had been disrupted in the manner shown, it would have been picked up and responded to.

151. Thus in answer to the second question/issue I am satisfied that the state of the verge at the time of the accident was not as suggested by Mr Runacres, but would have been in the same state as the filter drain depicted in the photographs to the east of police marker 3, and that the damage shown was caused almost exclusively by the nearside wheels of the Scania.

152. Of course, as I have indicated, this still implicates a combination of driver action and the state of the verge in the causation of the loss of control, that is a filter drain which was not able to withstand the excessive braking of a vehicle which had entered the verge at 50 miles an hour or so, and had sought to turn sharply to the right; in other words, there is a requirement to consider issue (c) above.

153. In addressing this question, in my judgment there are several matters which must be taken into account. The first is that the Claimant and its expert do not appear to contend for any different design to the filter drain itself, which it is accepted was constructed following best practice, even though there may have been some subsequent improvement, particularly to increase the hardening effect of the overlying asphalt plainings. It appears to be acknowledged that this drain had as its primary purpose a need to ensure that surface water was channelled away from the motorway, and if it was too hard or compacted, that purpose would be defeated. Instead, the criticism levelled at the highway authority relates to the broader design, including the fact that in a TTM vehicles inevitably would be passing extremely close to the verge and the filter drain, and that in the discharge of its duty to maintain and repair, other preventative measures were required. In other words, whilst the design could not be challenged *per se*, the drain becomes defective, and therefore not in a state of disrepair, if it can be “foreseeably” overrun by errant vehicles which may act in the same manner as Mr Mirek.

154. Obviously the Claimant faces a problem if contending that the *foreseeability* of injury or damage is the measure of Defendant’s statutory duty. Whilst it undoubtedly arises in the context of a common law duty of care, a number of authorities have repeatedly made it clear that the foreseeability of harm is irrelevant to the scope of the statutory duty. (See **Jones** [supra] and **James v Preseli Pembrokeshire District Council [1993] PIQR 114**). Therefore, I interpret the Claimant’s submission as relating to the question of *reasonable expectation*, which is the formula which defines the standard of care under section 58. It is not always possible to consider section 41 in complete isolation to the statutory defence section, because the duty to maintain is not otherwise defined.

155. Insofar as Mr Prynne QC seeks to implicate the wider scheme of the TTM and the potential risk from traffic running so close to the filter drain as creating a danger or a trap which required a consideration of broader measures such as warning signs, white lines/rumble strips, or the placement of cones (which is what happened after the accident) I am unable to accept that these are relevant matters for the purposes of determining whether there was an actionable defect in the highway. They are entirely extraneous to the structure or the fabric of the highway and although matters such as risk assessment and the provision of warning may be relevant to a broader/ common law public duty or the creation of a public nuisance, the scope of section 41 has been repeatedly limited by authority as excluding such considerations (see **Valentine** [supra]). I have no doubt that these are all matters which could be taken into account once it is established that a state of disrepair existed to the structure or

fabric of the highway. In particular it is likely that a highway authority which could not secure the immediate repair of a pothole dangerous to traffic but had cordoned off or provided significant warning to road users, had taken “*such care as in all the circumstances was reasonably required to secure that the part of the highway to which the action relates was not dangerous for traffic*”. These are all section 58 considerations, and in my judgment identified failures on the part of a highway authority in relation to risk assessment or warning cannot turn what is otherwise a highway in repair, to one that is in disrepair, so as to constitute an actionable defect.

156. In this regard I should also make brief comment about the role of the HSE and the criticisms which are seemingly made that there was a failure to properly assess and record risk. In my judgment, it must be borne in mind that the primary function of the HSE is to consider the safety of the workforce, and there is a very broad responsibility in terms of risk reduction to the lowest level reasonably practicable. This has no bearing on the statutory duty of the highway authority and it seems to me that it is unnecessary to make any finding as to whether the criticisms within the contravention notice were justified. None of them touch upon the state of the filter drain, which was not alleged by the Inspectors to be in a state of disrepair.

157. Therefore, it is necessary to focus on the state of the drain itself and whether or not in the condition as I find it to be (see paragraph 151 above) constituted a state of disrepair and thus an actionable defect. In this respect I agree that to an extent the question of design can be relevant. It may not be a sufficient discharge of the duty of a highway authority simply to assert that it has followed best practice by incorporating a particular type of construction into a part of the highway which is in accordance with guidance, or recommended, if it is clear that the design of such a construction is clearly unsuitable for the particular position in which it was installed and inherently defective.

158. Whilst Mr Prynne relies upon the juxtaposition of the verge and the running hard shoulder with the absence of a hard strip, save for the question of the adequacy of the carriageway white lines, which I address below, it is clear on the evidence that the filter drain was constructed probably in excess of the minimum standard required for any verge which was liable to occasional overrunning by errant vehicles, because that was the purpose of the hardening that was required. The collapse of a filter drain because of compression by a vehicle, or stone scatter onto the carriageway, were both design risks that had to be addressed, and the evidence clearly indicates that the design took these matters into consideration. What the design did not do, however, is provide a solution of sufficient strength which would have prevented the extreme forces which were applied to the filter drain by the driver in the circumstances of this accident.

159. The question then arises as to whether the incapability of the filter drain to withstand the sharp braking executed by Mr Mirek rendered the structure and fabric of the highway in disrepair, in that the drain was inadequate and represented a danger or a trap to road users. In my judgment it is here that questions of normal and ordinary use arise. As the authorities referred to have repeatedly emphasised, it is necessary to consider whether the highway was “reasonably passable” for ordinary traffic and could be safely subjected to normal use. Mr Prynne submits that it is here that a careful risk assessment might have identified the dangers which existed in such a tight scheme of a driver reacting in this way.

160. In this respect, however, I am not persuaded that the actions of Mr Mirek came within those which might be expected to amount to the ordinary user of the highway. In my judgment, whilst the straying of errant vehicles from the carriageway to the verge was a likely event, the combination of overrunning and apparent extreme braking from about 50mph by a driver who had probably not appreciated initially that he had strayed from the carriageway, followed by a turning sharply to the right causing the vehicle to overbalance, was such a rare occurrence that it did not require any different design or more robust construction of the filter drain to prevent the consequences. The duty is not an absolute one and it does not require a highway authority to legislate for such an extreme and rare event which went beyond the normal run of drivers. Whilst the making of mistakes by careless drivers should be anticipated, it seems to me that this was adequately dealt with by allowing for the hardening of the drain and a level differential which did not exceed significantly 25 mm from the edge of the carriageway. It was the additional error of Mr Mirek in reacting in the way in which he did that carried the greatest causative potency and led to the drainage damage and the eventual sequence of events which caused his loss of control. I accept the evidence that although vehicles did overrun from time to time, nothing like this had ever occurred before. Certainly the two previous incidents described, one of which was a vehicle overrunning, were of a completely different nature.

161. In my judgment an analogy here can be drawn with those cases where paving stones are out of alignment, but not to an excessive degree, say less than an inch, which is the measure used in most highway tripping cases. It has been set as a standard because the vast majority of pedestrians would not be endangered by such a projection, and it would not be reasonable to expect a highway authority to provide any greater level of evenness, although there may be some pedestrians in rare instances who would be caught out and trip. There is not a requirement on a highway authority in discharge of its statutory duty to guard against such exceptional events and a line must be drawn somewhere. As Steyn LJ (as he then was) said in **Mills v Barnsley MBC [1992] 1 PIQR**:

“...it is important that our tort law should not impose unreasonably high standards, otherwise scarce resources would be diverted from situations when maintenance and repair of the highways is more urgently needed.”

162. There is a clear objective test to be applied, and a standard should not be imposed which is “well-nigh unattainable”. In the context of this case I find that the actions of Scania driver were so exceptional and represented such an unlikely risk that there was no justification for constructing the filter drain in any different way.

163. A further consideration, which in my judgment also informs the duty of the highway authority is that the filter drain had a dual purpose; this was to ensure that not only could it cope with occasional errant vehicles overrunning, but also that it could act as a drain for surface water, and to prevent this pooling on the motorway which would itself have represented a danger for traffic. The construction of a drain in such a manner that it could cope with rare mistakes and extreme braking would defeat the purpose of the drain.

164. There are two other aspects of the motorway layout at the relevant location which are allegedly implicated in the overall defective condition relied upon by the Claimant, although perhaps pursued with a little less vigour, and they should be addressed.

165. The first of these is the depth of the verge ignoring the trough or the rut which was created by the vehicle itself. It is acknowledged that the measurements recorded scientifically prior to marker three, and therefore in the verge, in places exceeded 25 mm (between 3 and 6 cm). The lip between the edge of the concrete carriageway and the softer verge itself was not measured, and attempts were made from an interpretation of the photographs to suggest that it created something of a precipice for straying vehicles. Reliance is also placed upon the general assessment of both the police officer (that the verge was “low”) and the inspector from WS Atkins who drove past other sections of hard shoulder abutting the drainage verge describing a difference in levels that was “low”.

166. It seems to me that whilst a level differential that has been measured by Mr Fidler or surmised by other witnesses, may have been greater than that which was ideal and recommended by the highway authority’s own guidance for TTM, I am unable to conclude that this represented a state of disrepair so as to amount to an actionable defect. The objective measure is not whether the highway is compliant with published guidance, but whether it is not reasonably safe for traffic and highway users. I accept the evidence of Mr Fidler in this respect, that a fully laden truck such as that driven by Mr Mirek, would be only marginally affected by a level differential bearing in mind the diameter of the tyres (less than 3% lower than carriageway) and there is no evidence that the verge material was not capable of withstanding such a vehicle which did stray, absent extraordinary action taken by the driver, and enable easy return to the carriageway.

167. Even if I am wrong on this, there is a simple answer to the question of an actionable defect. The level differential had no causative effect on this accident. On the basis of my

findings it was the disruption of the asphalt planings by the heavy braking which caused it, an event which would have occurred whether or not the level differential was 25 mm or 75 mm. I am satisfied, on the evidence, that the lip or edge would not have prevented Mr Mirek regaining the carriageway had he simply corrected his steering. Thus any deficiency would not have amounted to disrepair on which the Claimant could rely. The analogy would be a pothole in the highway, which rendered the highway in clear disrepair but which the cyclist managed to avoid, before tumbling from his bicycle after striking the kerb, or perhaps encountering a different but minor deficiency in the road.

168. The second is the possibility of the faded white line, its absence, or a lack of sufficient distance from the verge. A measurement of 94 cm appears to be acknowledged, and certainly less than the 200 cm which would be recommended. In my judgment similar considerations apply as those above. First, the evidence of a missing white line relates only to the section beyond the point where the vehicle regained the carriageway. A white line was clearly in place between marker 3 and marker 4. Where the line begins to fade and possibly disappear, is the point at which the wheels were already embedded in the verge, as the driver was braking, and before he turned. Therefore any deficiency had no causative potency. Second, there is no helpful or accurate measurement of the distance of the white line from the verge at a point when the driver is likely to have been affected by the proximity to the verge. If this was less than 100 cm, or was placed very close to the verge, it is arguable that the driver may not have realised how little space he had available before overrunning. Nevertheless even in such circumstances in my judgment this would not amount to an actionable defect. It had no causative effect on the accident, which as indicated above was the way that the driver responded to finding himself on the softer verge material. Third, and definitively, the white line is more akin to a warning sign not part of the structure or fabric of the highway, and on the basis of cases such as **Gorringe** and **Valentine** [supra] would be outwith the section 41 duty.

Conclusion

169. In all the circumstances, and addressing the questions which I identified in paragraph 139 above, I have come to the conclusion that the Claimant cannot satisfy this court that the highway was in a state of disrepair so as to potentially render the Defendant in breach of its duty under section 41 of the Highways Act 1980. It follows that it is unnecessary to consider the statutory defence or any question of apportionment. I have reflected on whether or not this exercise should be undertaken on a hypothetical basis but in my judgment it would be artificial and unhelpful. Mr Weitzman QC had already indicated that if I found the trough/rut shown in the photographs to be pre-existing, then it is unlikely that the Defendant would be able to satisfy the court that a reasonable system of inspection and repair had picked up the problem. It would have been obvious, and there must have been a failure in the system. In the

light of my findings that it did not exist, but was caused by the actions of the Scania, any question of a system of inspection and repair becomes irrelevant.

170. This claim for a contribution therefore fails. I invite the parties to agree the terms of any consequential orders.