



Neutral Citation Number: [2019] EWHC 989 (TCC)

Case No: HT-2017-000262

IN THE HIGH COURT OF JUSTICE
BUSINESS AND PROPERTY COURTS OF ENGLAND AND WALES
TECHNOLOGY AND CONSTRUCTION COURT (QBD)

Rolls Building, Fetter Lane,
London, EC4A 1NL

Date: 17 April 2019

Before :

THE HONOURABLE MR JUSTICE PEPPERALL

Between :

**SWANSEA STADIUM MANAGEMENT
COMPANY LIMITED**

Claimant

- and -

**(1) CITY & COUNTY OF SWANSEA
(2) INTERSERVE CONSTRUCTION LIMITED**

Defendants

Justin Mort QC and Tom Owen (instructed by **Douglas-Jones Mercer**) for the **Claimant**
Riaz Hussain QC (instructed by **City & County of Swansea**) for the **First Defendant**
Paul Darling OBE QC (instructed by **Reynolds Porter Chamberlain LLP**) for the **Second Defendant**

Hearing dates: 30, 31 October and 1, 5, 6, 8, 19 & 20 November 2018

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.

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MR JUSTICE PEPPERALL:

1. The Liberty Stadium in Swansea is owned by the City & County of Swansea [“the Council”] and is the home of Swansea City Football Club and Ospreys Rugby Club. It was opened to the public on 23 July 2005 when it hosted Swansea City’s match against Fulham.
2. Work started on the new stadium in late September 2003. By a building contract dated 17 June 2004, executed as a deed, the Council employed Interserve Construction Limited [“Interserve”] as the main contractor to design and build the stadium. The contract was in the form of the 1998 edition of the JCT’s Standard Form of Building Contract with Contractor’s Design with amendments 1-4 and some further bespoke provisions. On 1 April 2005, Gardiner & Theobald, the Employer’s Agent under the building contract, certified that the works had reached Practical Completion on 31 March 2005. The Defects Liability Period ran for 12 months from Practical Completion.
3. Meanwhile, the Council, the football club and the rugby club incorporated Swansea Stadium Management Company Limited [“SSMC”] in order to operate the stadium for the benefit of the clubs. Although initially a joint venture company, SSMC is now wholly owned by the football club. By a lease dated 22 April 2005, the Council leased the stadium to SSMC for a term of 50 years. Although not a party to the building contract, SSMC has the benefit of a collateral warranty from Interserve in respect of the building works. The warranty was given by way of an undated deed. Further, by a deed executed on 21 July 2006 between the Council, SSMC and the clubs, the Council agreed to take all reasonable steps to enforce its rights under the building contract.
4. As I relate more fully below, there were, among other issues, problems with both the concourse flooring and the paintwork:
 - 4.1 A number of spectators slipped in wet conditions. Remedial work was therefore undertaken at SSMC’s cost in 2009 in order to improve the slip resistance of the flooring.
 - 4.2 There were issues with the repair of damage caused during the handling and erection of the pre-painted steelwork. The paintwork also suffered discolouration, rust and ultimately delamination of the coatings. These issues were attended to on a number of occasions by Interserve’s specialist subcontractors. By this claim, SSMC alleges that the remedial works were not effective.
5. Notwithstanding these problems, on 26 May 2011, Gardiner & Theobald issued the Notice of Completion of Making Good Defects. Such notice formally certified in accordance with clause 16.4 of the building contract that the defects which the Council might require to be made good had been made good as of 14 April 2011. Finally, on 14 June 2012, the

Council and Interserve entered into a settlement agreement in respect of the contractor's final account.

6. On 4 April 2017, SSMC commenced these proceedings against both the Council and Interserve. Its primary case was that the original building works were defective and in breach of the contractual specification. These construction claims were, however, struck out by O'Farrell J because they were brought 4 days after the expiry of the limitation period: Swansea Stadium Management Co. Ltd v City & Council of Swansea [2018] EWHC 2192 (TCC), [2019] B.L.R. 652. Accordingly, SSMC falls back on two secondary claims:
 - 6.1 As against the main contractor, SSMC alleges that Interserve was in breach of its obligations under clause 16 of the building contract to identify and make good the flooring and paintwork defects during the Defects Liability Period. It therefore claims that it was likewise in breach of the collateral warranty.
 - 6.2 As against the Council, SSMC alleges that the Council was in breach of its obligations under the 2006 agreement to take all reasonable steps to enforce its own rights under the building contract in respect of the flooring and paintwork defects.
7. Although the case was also opened against the Council on the basis that it was in breach of an implied repairing obligation under the 2005 lease, such claim was not pursued in closing submissions.
8. In the event that liability is established against the Council, it seeks a contribution or indemnity in respect of such liability from Interserve. That aside, the Council as Employer under the building contract has not issued its own claim against the main contractor. Indeed, it accepted through its agent that Interserve had complied with its obligations to make good defects arising during the Defects Liability Period by 14 April 2011 and it agreed the contractor's final account on 14 June 2012.
9. This judgment is arranged as follows:

The contractual basis for the claim against Interserve	Paragraphs 10-14
The contractual basis for the claim against the Council	Paragraphs 15-18
The Notice of Completion of Making Good Defects	Paragraphs 19-36
The settlement agreement	Paragraphs 37-43
The evidence	Paragraphs 44-59
The flooring claim	Paragraphs 60-120
The paintwork claim	Paragraphs 121-201
Decision	Paragraph 202

THE CONTRACTUAL BASIS FOR THE CLAIM AGAINST INTERSERVE

THE ORIGINAL CONSTRUCTION CLAIMS

10. In granting Interserve summary judgment upon its limitation defence, O'Farrell J held that:
- 10.1 an Employer's cause of action for breaches of the obligation to carry out and complete building works accrues on Practical Completion;
- 10.2 by letter dated 1 April 2005, Gardiner & Theobald, the Employer's Agent under the building contract, had certified that Practical Completion had been reached on 31 March 2005;
- 10.3 although:
- a) there was no evidence that Interserve had then complied with clause 6A.5.2 (its obligation to provide a health and safety file in accordance with the Construction, Design & Management Regulations); and
- b) SSMC alleged that there were both defects and outstanding works at 31 March 2005,
- on a proper construction of clause 16.1 of the building contract, Practical Completion was "deemed for all purposes" to have taken place on the day named in the Employer's written notice of Practical Completion;
- 10.4 accordingly, time for suing upon the obligations to carry out and complete the building works ran from 31 March 2005 and, the contract being by way of deed, any claim was statute barred upon issue on 4 April 2017; and
- 10.5 although:
- a) SSMC's claim was brought under the collateral warranty; and
- b) such warranty was not executed until, at the earliest, April 2005,
- the claim under the warranty was likewise statute barred since, on the proper construction of the warranty, Interserve's liability to SSMC was coterminous with its direct contractual liability to the Council under the building contract.

THE DEFECTS LIABILITY PERIOD

11. As already indicated, this claim is therefore pursued against Interserve on the basis that it failed to make good defects during the Defects Liability Period. Such period ran for 12 months from Practical Completion; i.e. from 31 March 2005 to 31 March 2006. Clauses 16.2-16.3 of the building contract provided:

"16.2 Any defects, shrinkages or other faults which shall appear within the Defects Liability Period and which are due to failure of the Contractor to comply with his obligations under this Contract or to frost occurring before Practical Completion of the Works, shall be specified by the Contractor in a Draft Schedule of Defects which he shall deliver to the Employer not later than 14 days after the expiration of the said Defects Liability Period, and the Employer may within 21 days of receipt of such Draft Schedule notify the Contractor of his comments and any further such defects, shrinkages or other faults which are to be included in the Schedule. 28 days after delivery of the Draft Schedule to the Employer the Contractor shall deliver to the Employer a Schedule of

Defects which shall be based upon the Draft Schedule and shall take account of the comments and further items notified by the Employer (if any) and within a reasonable time after delivery of such Schedule the defects, shrinkages and other faults therein specified shall be made good by the Contractor at no cost to the Employer unless the Employer shall otherwise instruct; and if the Employer does so otherwise instruct then an appropriate deduction in respect of any such defects, shrinkages or other faults not made good shall be made from the Contract Sum.

16.3 Notwithstanding clause 16.2 the Employer may whenever he considers it necessary so to do, issue instructions requiring any defect, shrinkage or other fault which shall appear within the Defects Liability Period and which is due to failure of the Contractor to comply with his obligations under this Contract or to frost occurring before Practical Completion of the Works, to be made good and the Contractor shall within a reasonable time after receipt of such instructions comply with the same at no cost to the Employer unless the Employer shall otherwise instruct; and if the Employer does so otherwise instruct then an appropriate deduction in respect of any such defects, shrinkages or other faults not made good shall be made from the Contract Sum. Provided that no such instructions shall be issued after delivery of a Schedule of Defects or after 14 days from the expiration of the Defects Liability Period.”

12. Clause 16.2 was significantly amended from its standard form. As originally drafted in this edition of the JCT terms, the schedule of defects would be delivered by the Employer and the Contractor’s obligation was simply to make good the defects so listed. The bespoke clause 16.2 set out above reversed this provision, requiring the Contractor to provide both a draft and final schedule and simply permitting, but not requiring, the Employer to comment on the draft schedule before it was finalised. Contrary to the standard form, clause 16.2 in this case implicitly required the Contractor both to identify and schedule the defects.

13. Accordingly:

13.1 The liability to make good defects under clauses 16.2 and 16.3 applied only to defects:

- a) appearing between 31 March 2005 until 31 March 2006; and
- b) (ignoring the irrelevant case of frost damage) which were due to Interserve’s failure to comply with its obligations under the building contract.

13.2 Under clause 16.2:

- a) Interserve was obliged to identify and then specify such defects in a draft schedule of defects by 14 April 2006.
- b) The Council was entitled, but not obliged, to comment on the draft schedule within 21 days of its receipt.
- c) Interserve was obliged to deliver its final schedule of defects, taking into account any such comments, within 28 days of its original draft schedule. The longstop date was therefore 12 May 2006.

- 13.3 While the Council could simply leave Interserve to comply with the machinery under clause 16.2, it had a time-limited option under clause 16.3 to issue instructions to make good such defects.
- 13.4 Whether under clause 16.2 or 16.3, Interserve was then obliged to make good the defects within a reasonable time unless the Council instructed it otherwise; in which case the cost of the remedial works would be deducted from the price of the building contract.
14. Mr Darling OBE QC, who appears for Interserve, is right to point to the fundamental difference between the Contractor's general liability for carrying out and completing the works and its liability under clauses 16.2 and 16.3. Clause 16 does not operate as a general liability for defects in the construction work but imposes specific obligations:
- 14.1 to identify defects that appear during the Defects Liability Period (clause 16.2); and
- 14.2 to make good defects whether listed in the Contractor's schedule (clause 16.2) or as instructed by the Employer (clause 16.3).

THE CONTRACTUAL BASIS FOR THE CLAIM AGAINST THE COUNCIL

THE 2006 AGREEMENT

15. The claim against the Council is brought pursuant to clause 7 of the 2006 agreement, which provided:
- “7.1 For the avoidance of doubt nothing in this Agreement shall affect the obligations on the part of [SSMC] under clause 3.4.1 of the Lease and in respect of any Latent Defect (which term is defined in the Lease) [the Council] shall take all reasonable steps at its own expense to enforce its rights arising out of any contract warranty or service agreement entered into by it in connection with the design, construction, installation and fit out of the Liberty Stadium and to enter into such agreements for settlement or otherwise as it reasonably considers appropriate having regard to all the circumstances of the case.
- 7.2 It is acknowledged by [the Council] that the indemnity in clause 4.1 shall not extend to Latent Defects which remain the responsibility of [the Council] in accordance with the provisions of clause 7.1 above and nor shall it extend to any remedial work to be carried out by the contractor in pursuance of any snagging list arising from the construction of the Liberty Stadium. [The Council] shall consult with the Clubs as to the content of the snagging list and shall take all reasonable steps to enforce its rights in respect thereof and to enter into such agreements for settlement or otherwise as it reasonably considers appropriate having regard to all circumstances of the case.”
16. As will be apparent, clause 7.1 is concerned with Latent Defects:
- 16.1 While I was taken to a number of cases as to what might constitute a latent defect, these authorities were not in point since clause 7.1 expressly adopted the definition used in the lease, namely:

“a defect existing but not visible at the commencement of the Term which is the result of defective design of the Property or defective workmanship or defective material used during its construction.”

- 16.2 The issue is therefore whether the Council failed to take all reasonable steps to enforce its rights in respect of a defect that was:
- a) existing but not visible on 22 April 2005; and
 - b) which was caused by defective design, defective workmanship or the use of defective materials.
- 16.3 In their correspondence, the parties discussed whether particular defects were latent or not. Such correspondence does not particularly assist me for two reasons:
- a) First, for the most part it is not clear that the parties had the definition under the lease in mind rather than the commonly understood sense of defects that could not be discovered on reasonable inspection.
 - b) Secondly, even where the parties had the contractual test in mind, it is for the Claimant to prove on the evidence that a particular defect was latent within the meaning of the lease. Proof only that somebody thought it was a latent defect within the terms of the lease is obviously not conclusive.
- 16.4 Mr Hussain QC, who appears for the Council, is right to observe that clause 7.1 is concerned with defects in the stadium and that a breach of the building contract might not necessarily amount to a defect under the lease. That said, once a defect has been proved the court is then required to consider the building contract as the source of the rights that the Council agreed to take all reasonable steps to enforce.
- 16.5 I also accept Mr Hussain’s submission that it is the defect and not its full consequences that needs not to have been visible.
17. The Council’s obligation to pursue Interserve under the building contract was qualified. It had to take “all reasonable steps.” In assessing its actions on any particular issue, it is important to remember a number of aspects of the matter:
- 17.1 First, while the Council was the freehold owner of the stadium and the employer under the building contract, it did not have possession or day-to-day control of the site. The stadium was leased to and operated by SSMC. Accordingly, it was reasonable for the Council to rely on SSMC to take primary responsibility for monitoring the state of the stadium and for reporting defects.
 - 17.2 Secondly, the Council had the benefit of a direct contractual relationship with Interserve and was the principal channel through which defects would be reported.
 - 17.3 Thirdly, while the Council had the primary contractual relationship, SSMC was able to enforce the obligations under the building contract directly against Interserve in reliance upon the collateral warranties.
 - 17.4 Fourthly, the obligation was to take all reasonable steps to enforce “its rights.” As will be seen below, there is an important distinction between the Council’s rights and those of SSMC.
18. Clause 7.2 is a quite separate obligation to take all reasonable steps to enforce the Council’s rights in respect of any item on a snagging list. SSMC did not particularise any case under

clause 7.2 in its Particulars of Claim but subsequently identified a snagging list produced by Faber Maunsell in October 2006.

THE NOTICE OF COMPLETION OF MAKING GOOD DEFECTS

19. Clause 16.4 of the building contract provided:

“When any defects, shrinkages or other faults which the Employer may have required to be made good under clauses 16.2 and 16.3 shall have been made good he shall issue a notice to that effect, which notice shall not be unreasonably delayed or withheld, and completion of making good defects shall be deemed for all the purposes of this Contract to have taken place on the day named in such notice (the ‘Notice of Completion of Making Good Defects’.)”

20. On 26 May 2011, Gardiner & Theobald issued the Notice of Completion of Making Good Defects. Such notice formally recorded in accordance with clause 16.4 that the defects which the Council had required to be made good had been made good as of 14 April 2011. It had the effect of releasing the final tranche of retention monies. The covering letter made express reference to, among other matters, the flooring issue:

“With reference to the Concourse Floor, it does not seem to be appropriate to ‘rehash’ all the arguments there have been on whether this is, or is not, a defect, but suffice to say that with the work done by SSMC, the problem with the floor finish appears to have been resolved. The Council and ourselves accept that it may not be appropriate that the full works of the remedial non-slip floor covering solution adopted by SSMC should be borne by [Interserve]. We also tend to agree that the area treated by SSMC is probably more than the initially affected concourse area. However, we consider that a ‘shot-blasting’ solution could have been undertaken by [Interserve] and a cost has been assessed for this on the basis of a measured area of 4530m² at a rate of £7.50/m².”

21. The letter also contained a payment reconciliation offsetting three sums against the retention monies:

21.1 £200,000 for pitch subsidence repairs;

21.2 £33,975 for shot blasting 4,530m² of the concourse floor at £7.50/m² to reduce its slipperiness; and

21.3 £25,695 for remedial work to the segregation arrangements for rival supporters in the north stand.

22. Mr Darling argues that the effect of the issue of the notice under clause 16.4 is that Interserve is deemed to have complied with its obligations to make good defects pursuant to clauses 16.2 and 16.3. It is, he contends, conclusive evidence that necessarily defeats SSMC’s claims under the Defects Liability provisions. Alternatively, if not conclusive, he argues that it is strong evidence that the Council and its agent, Gardiner & Theobald, believed in May 2011 that Interserve had complied with its obligations under clause 16.

23. Justin Mort QC and Tom Owen, who appear for SSMC, accept that the notice is evidence telling against SSMC's claims under clause 16 but argue that the effect of the deeming provision in clause 16.4 is limited to administrative matters that are tied to the completion of making good, such as the release of retention monies. Were the position otherwise, they submit that the Employer would essentially be barred from alleging a breach of contract where defects in the remedial work only become apparent after issue of the notice. Further, Mr Mort relies on the reference in the covering letter to the flooring issue, which, he submits, indicates not that the flooring had been made good but rather that it had not and that SSMC had carried out the remedial work at its own cost.
24. In my judgment, there is nothing in Mr Mort's submissions that the letter indicated problems with the flooring or that the flooring had been made good by SSMC and not Interserve. It was always open to the Council as Employer under the building contract to instruct that it would carry out the necessary remedial work and make an appropriate deduction from the contract price. Here, the Council was proposing that a deduction be made from the contract price in order to reflect the remedial work that Interserve had not been required to undertake. The fact that such work had been paid for by SSMC rather than the Council is neither here nor there; the short point is that Interserve was not required to carry out flooring repairs.
25. The principal issue as to the effect of the notice does, however, require closer analysis. Clause 16.4 was not amended from the then standard form JCT contract. Mr Mort therefore referred me to the seventh edition of Keating on Building Contracts published in 2001 for commentary on essentially the same contractual wording in clause 17.4 of the then current edition of the JCT contract. At paragraph 18-184, Keating explains:
- “The Certificate of Completion of Making Good Defects is some, but not conclusive, evidence of the completion of the Works in accordance with the Contract and of the making good of defects (clause 30.10).”
26. The reference to clause 30.10 is to a clause in the then standard form JCT contract that read:
- “Save as aforesaid, no certificate of the architect shall of itself be conclusive evidence that any works, materials or goods to which it relates are in accordance with the contract.”
- This is by way of contrast to clause 30.9 which provided that the Final Certificate is conclusive evidence of the matters certified.
27. The same edition of Keating continues at paragraph 18-186 to consider liability for defects appearing after the certificate:
- “If defects appear after the Certificate of Completion of Making Good Defects is issued under clause 17.4, the Architect has no power to issue any further instructions but can adjust any further certificate. The amount of the adjustment is, it is submitted, assessed by the cost of rectification or, where the breach is irremediable, the diminution in value of the Works ...

In so far as such defects, as they appear, evidence a breach of contract by the Contractor, the usual rules as to damages, including those relating to mitigation, apply, so that ordinarily the Employer should give the Contractor an opportunity of remedying the defects if it is reasonable to do so.”

28. The tenth edition published in 2016 provides the same guidance at paragraphs 20-206 and 20-208 in respect of the similarly worded deeming provision in clause 2.39 of the 2011 edition of the JCT contract.
29. I accept Mr Mort’s submission that the Notice of Completion of Making Good Defects is not conclusive evidence of compliance with the core obligations under clauses 2 and 8 of this building contract to design the works with reasonable skill and care and to carry out and complete the works in accordance with the contractual specification and in a proper and workmanlike manner. This is therefore the answer to his submission that the employer must be able to sue in respect of defects in the remedial work first appearing after issue of the notice. This is not, however, a usual claim under such core obligations but rather a claim for breach of the obligations to make good defects in accordance with the contractual machinery in clauses 16.2 and 16.3.
30. Paragraph 18-183 of the 2001 edition of Keating draws the distinction:

“Clause 17 imposes a liability and gives a right to make good defects. It does not exclude a claim for damages in respect of those breaches. It is no more than a simple mechanism for dealing with such breaches, but it is not to be construed as depriving the injured party of his other rights.”

Again, the same point is made at paragraph 20-205 in the current edition of Keating in respect of clause 2.38 of the 2011 edition of the JCT contract.
31. In my judgment, upon the proper construction of clause 16.4, the effect of the issue of the Notice of Completion of Making Good Defects was to deem “for all the purposes” of the building contract that the parties had reached completion of the discrete and more limited obligation to make good defects in accordance with the contractual machinery in clauses 16.2 and 16.3. That is what clause 16.4 says in terms. Further, properly understood, the commentary in Keating is making that point:
 - 31.1 Keating explains that after the certificate, the architect cannot issue a further instruction to make good. Such instructions would be given under clause 2.38 of the 2011 JCT contract or by the Employer under clause 16.3 of the contract in this case.
 - 31.2 Notice of Completion of Making Good Defects under clause 16.4 (or indeed a Certificate of Making Good under clause 2.39 of the 2011 contract) does not bar a claim for a failure to make good defects; such claim does, however, have to be brought pursuant to the core obligations in the building contract.
32. This analysis is consistent with O’Farrell J’s construction of the similar deeming provision in clause 16.1 of the same contract. In giving judgment on the limitation issue, she said, at [64]:

“Clause 16 expressly states that, where [a statement of Practical Completion] has been given: ‘Practical Completion of the Works shall be deemed for all the purposes of this Contract to have taken place on the day named in such statement.’ The effect of this deeming provision is that the parties agree that the works will be practically complete under the Building Contract, even if there are outstanding or defective works.”

33. So too here, Notice of Completion of Making Good Defects brings to an end the contractual machinery under clauses 16.2-16.3. Any defects within clauses 16.2 and 16.3 were deemed to have been made good for the purposes of such machinery, even if they had not been, but that did not deprive the Council of its claims under the core provisions of the building contract if there were outstanding or defective works.
34. In his closing submissions, Mr Mort relied on the line of authorities from Beaufort Developments v. Gilbert-Ash [1999] 1 A.C. 266 and Henry Boot Construction Ltd v. Alstom Combined Cycles Ltd [2005] EWCA Civ 814; [2005] 1 W.L.R. 3850 to Grove Developments Ltd v. S&T (UK) Ltd [2018] EWHC 123 (TCC); [2018] B.L.R. 173 and, on appeal, [2018] EWCA Civ 2448; [2019] B.L.R. 1 for the proposition that certificates or other equivalent documents are not conclusive as to the parties’ rights unless the parties have clearly so provided. It is not, however, necessary to examine these cases in more detail since I readily agree that the issue of the Notice of Completion of Making Good Defects was not conclusive as to the parties’ rights and that the Council remained entitled to contend, right up until the limitation period expired, that Interserve was in breach of its core obligations under the building contract. That does not, however, prevent the notice from being conclusive as to claims under the defects liability machinery in clause 16.
35. SSMC’s claim under clause 16 is of a course a further step removed in that it relies on the collateral warranties rather than any direct entitlement to sue upon the building contract. The result, however, is the same. As O’Farrell J explained, Interserve’s liability to SSMC under the warranties was coterminous with its liability to the Council under the building contract. Accordingly, the claim under the warranties must also fail.
36. For these reasons:
 - 36.1 SSMC’s claim against Interserve for alleged breaches of its obligations under clause 16 of the building contract to identify and make good defects that became apparent during the Defects Liability Period fails and must be dismissed.
 - 36.2 Equally the Council could not seek to enforce the Defects Liability provisions in clause 16 of the building contract after the Notice of Completion of Making Good Defects was issued on 26 May 2011. Accordingly, the Council cannot be in breach of its obligations under clauses 7.1 and 7.2 of the 2006 agreement in so far as it failed to seek to enforce such rights after that date.

THE SETTLEMENT AGREEMENT

37. The Council and Interserve agreed the final account on 14 June 2012. Their settlement agreement recorded:

- “1. [The Council] and [Interserve] have been in discussions regarding various construction defects and alleged potential latent defects.
2. As a result of the discussions referred to at paragraph 1 above [the Council] and [Interserve] may not have complied with all terms of the Contract in relation to:-
 - (a) Preparation of a Schedule of Defects; or
 - (b) The Final Account, in particular, clauses 30.5 and 30.6 of the Contract.
3. Notwithstanding this potential failure of [the Council] and [Interserve] to adhere to the Contract as set out at paragraph 2 above, [the Council] has now issued a Notice of Completion of Making Good Defects and [the Council] accepts that [Interserve] has complied with the obligations it had to [the Council] during the Defects Liability Period as detailed at clause 16 of the Contract.
4. Following the discussions between [the Council] and [Interserve] referred to at paragraph 1 above, [the Council] and [Interserve] have reached agreement on the final sum to be paid to [Interserve] under the terms of the Contract. In this regard it has been agreed that the final account for the Contract is £27,293,617.22, with £47,500.00 being retained in respect of the matters listed in paragraph 5 below. Accordingly, it has been agreed that [the Council] will release the sum of £72,640.76 (‘Released Sum’) to [Interserve] and it is acknowledged and agreed by [Interserve] that this sum represents the final payment due to [Interserve] under the Contract and that no further payments will be made by [the Council] to [Interserve] in respect of the Contract.
5. [The Council] will take no further action in relation to the following issues which have arisen at the Liberty Stadium, which have been the subject of correspondence between Gardiner & Theobald LLP and [Interserve] and discussions between [the Council], [Interserve] and Gardiner & Theobald LLP:-
 - (a) the omission of a turnstile to allow 1152 people to access the North Stand between grid lines 57-60;
 - (b) the slip resistance of the concourse flooring;
 - (c) subsidence of the pitch
 - (d) any defect, shrinkage or other fault which [the Council] may have required to be made good by [Interserve] in accordance with clause 16 of the Contract.
6. Save for the specific issues set out in paragraphs 5 and 7 of this letter, nothing in this letter shall operate or be interpreted to affect, whether expressly or impliedly, any of the rights and remedies available to [the Council] or [Interserve].
7. It is acknowledged and agreed between [the Council] and [Interserve] that the payment of the Released Sum by [the Council] to [Interserve] shall not, whether expressly or impliedly, constitute any settlement or agreement to

settle any claims which [the Council] may seek to bring against [Interserve] (whether such claims are known or unknown as at the date of this letter), save for any claims in relation to:-

- (a) the matters listed at paragraph 5 above: and
- (b) [Interserve's] obligations to [the Council] under clause 16 of the Contract

(collectively referred to as the 'Released Matters').

8. Both parties hereby reserve all other rights and remedies against each other, whether such rights and remedies arise under the Contract or otherwise, in respect of any matter other than the Released Matters. [The Council] and [Interserve] agree that nothing in this letter shall be read with the effect of limiting any rights or remedies that any party may have against the other, howsoever arising, save for in respect of the Released Matters."

THE EFFECT OF THE SETTLEMENT AGREEMENT AS BETWEEN THE COUNCIL AND INTERSERVE

38. For the reasons already explained, any claim under clause 16 did not survive the issue of the Notice of Completion of Making Good Defects on 26 May 2011. If, however, I am wrong and the notice did not itself bar a claim for failure to make good defects during the Defects Liability Period, the Council plainly compromised its ability to bring a claim pursuant to clause 16 by the settlement agreement:
 - 38.1 First, by paragraph 3 of the June 2012 agreement, the Council expressly acknowledged Interserve's compliance with its obligations under clause 16.
 - 38.2 Secondly, by paragraphs 5(d) and 7 of the agreement, the Council agreed and acknowledged that it would take no further action in respect of any defect which it might have required to be made good in accordance with clause 16.
39. Further, clauses 5(b) and 7(a) of the agreement expressly compromised the Council's entitlement to bring any claim in respect of any allegation as to the slip resistance of the concourse flooring.
40. There was no such express settlement in respect of the paintwork. In my judgment, upon the true construction of clauses 5(d) and 7 of the June 2012 agreement, there was settlement of any clause-16 claim in respect of the paintwork defects but not of any claims under the core contractual obligations.
41. Thus, the position is as follows:
 - 41.1 Until 26 May 2011, the Council was entitled to seek to enforce either the clause 16 obligations or the primary contractual obligations under the building contract.
 - 41.2 Between 26 May 2011 and 14 June 2012, the Council was entitled to seek to enforce the primary contractual obligations, but not clause 16.

41.3 From 14 June 2012, the Council had no remaining rights to enforce in respect of the concourse flooring. It remained entitled, however, to seek to enforce its rights under the primary contractual obligations in respect of the paintwork.

THE EFFECT OF THE SETTLEMENT AGREEMENT AS BETWEEN SSMC AND INTERSERVE

42. By its Defence, Interserve pleads that the 2012 agreement was entered into by the Council for itself and on behalf of SSMC. Accordingly, Interserve seeks to defend SSMC's claims on the additional basis that such claims were compromised.
43. I accept Mr Mort's submission that the 2012 agreement is irrelevant to SSMC's own direct claims against Interserve. I take the matter shortly in view of my conclusions that such claims fall to be dismissed in any event:
- 43.1 On the face of the 2012 agreement, the Council did not purport to contract for SSMC.
- 43.2 There is no evidence that the Council was authorised to act as SSMC's agent in entering into the settlement agreement, or that SSMC held out the Council as so authorised such that it is now bound by the settlement agreement.
- 43.3 While clause 7.1 of the 2006 agreement between the Council and SSMC anticipated that the Council might settle any claims against Interserve, this was by way of qualification to the Council's contractual obligation to enforce the building contract. Accordingly, such settlement - if reasonably entered into - might be deployed by the Council by way of defence to the allegation that it had failed properly to enforce the building contract but it did not mean that SSMC had thereby compromised its own independent cause of action pursuant to the collateral warranties against Interserve.
- 43.4 In any event, the agreement did not purport to settle any claim as between SSMC and Interserve.

THE EVIDENCE

LAY WITNESSES

44. The parties called just two lay witnesses to give oral evidence at trial. SSMC called its director, Andrew Davies, who is also employed by the football club as its Head of Operations, Facilities & Development while the Council called its Director of Place, Martin Nicholls.
45. Neither man was involved from the outset of this project:
- 45.1 Mr Davies joined SSMC as its Operations Manager on 1 August 2005. By that time, the construction work had been completed and the stadium had been handed over to SSMC. On 1 February 2006, Mr Davies was appointed General Manager. He explained that it was from that time onwards that he became personally involved in issues concerning the stadium.
- 45.2 Mr Nicholls has been employed by the Council since 1991 but only became involved with the stadium project in March 2010.

46. Accordingly, I did not hear from any witness who had been directly involved in the building project. While Mr Davies was at least able to go back to February 2006, he suffered from the difficulty that others had been more closely involved in the construction project. Gwilym Joseph, a former director of both SSMC and the football club with a background in construction, had led on the project. SSMC engaged Faber Maunsell to act as its engineering consultant and the firm's Terry Noonan was the principal consultant on the project. Sadly, both Gwilym Joseph and Terry Noonan have since died and Mr Davies has therefore had to do his best to fill the void. Necessarily much of his evidence about events in 2004/5 was little more than putting into evidence contemporaneous documents about which he had no first-hand knowledge.
47. Likewise, the lead contact at the Council in respect of the stadium project had been Steven Dinnick. Mr Nicholls was able to give first-hand evidence of events from March 2010. Otherwise, he could only refer to documents in respect of earlier events in which he had no involvement.
48. The evidential gap was to some extent plugged by Interserve who served statements from its former Contracts Manager, David Keepings, and its former Regional Director, Andrew Edmonds. Both men were heavily involved in the contract. Mr Edmonds had put together Interserve's bid and oversaw the contract while Mr Keepings had managed the construction work. In the event, neither man was called to give oral evidence but both SSMC and the Council relied upon Mr Edmonds' statement as hearsay evidence. Further, SSMC also relied on Mr Keepings' statement. Of course, notices were not served pursuant to s.2 of the Civil Evidence Act 1995. Such failure does not affect admissibility but may be taken into account as a matter adversely affecting weight: ss.2(4)(b) and 4 of the Civil Evidence Act 1995. Where, as here, notice was not given for the very good reason that SSMC and the Council had expected Interserve to call its own witnesses, it would plainly be inappropriate to have regard to the lack of notice.
49. In assessing weight, I take into account the fact that these witnesses' evidence was not tested by cross-examination. That said, I observe that Mr Edmonds' evidence was effectively agreed, having been served by Interserve and relied on as hearsay evidence by both of the other parties.
50. Rather than analyse the lay evidence separately, I shall instead weave the important oral evidence into the thread of the narrative told by the documents. It is, however, necessary for me to deal with the sustained attack made as to Mr Davies' credibility.
51. On 3 August 2018, Mr Davies signed a statement of truth on some Further Information. That document included the following assertion in respect of the paintwork:

“Whatever manifestations of defects there may have been prior to the Term Commencement Date of the lease (22 April 2005), those were resolved (or ostensibly so) and, in any event, were not visible as at that date.”

52. In cross-examination, Mr Davies accepted that this proposition was wrong. He said in terms that, having been taken through the contemporaneous documents, he accepted that there were still defects to be resolved at 22 April 2005. Asked why he had signed the statement of truth on the Further Information, Mr Davies explained:
- “Because I cannot see how the clubs, Messrs Noonan and Joseph who were leading the project at that time, would possibly have entered into a lease if they felt that the defects had not been completed to a point that didn’t compromise them going forward.”
53. Mr Davies observed that there were a considerable number of documents and that the Further Information represented what he understood at the time. He added:
- “I know these documents, I can see what the documents say, but ultimately my understanding from the time – from having spoken to the people leading on the project at that time – was that the defects were largely ... completed by the time the stadium was occupied.”
54. He was pressed by both Mr Hussain and Mr Darling as to why he had signed the statement of truth. Such cross-examination was entirely proper. Nevertheless, I reject the attack on Mr Davies’ credibility. He was, in my judgment, an honest witness caught in the difficult position of standing in for his late colleague who knew this project inside out and who was asked to approve a pleading drafted by SSMC’s lawyers not on the basis of Mr Davies’ own knowledge and evidence but upon the lawyers’ interpretation of the contemporaneous documents. Indeed, his honesty was demonstrated by the many concessions that he properly made against SSMC’s interests and, specifically, by his acceptance when taken through the evidence on the issue that he could not support SSMC’s own pleaded case.
55. In my judgment, both Mr Davies and Mr Nicholls were doing their best to assist the court in difficult circumstances. I accept their evidence in respect of events in which they were personally involved as both reliable and truthful. Their evidence was less useful in so far as they offered, or were challenged in cross-examination as to, their interpretation of events with which they were not involved. Fortunately, this is a well-documented dispute and the lack of eye witness evidence was in large measure ameliorated by the availability of the contemporaneous documents. To a large extent these documents have had to speak for themselves.
56. In their evidence, Mr Edmonds and Mr Keepings explained that Mr Noonan had initially been involved with another contractor’s unsuccessful tender for the works. Interserve viewed Mr Noonan as generally unhelpful and dismiss many of his concerns as being rooted in his disagreement with the design decisions made on the project. The contemporaneous documents lend some support to that view and it is evident that there was tension between the Council’s agent, Gardiner & Theobald, and Mr Noonan. That said, as I set out below, there were serious issues in respect of both the flooring and the paintwork on this project and Mr Noonan was ultimately proved right in raising his concerns.

57. Although I did not have the benefit of hearing Interserve's witnesses give oral evidence, I accept that their evidence was both reliable and truthful. That said, the documentary evidence was again more useful.

THE EXPERT WITNESSES

58. I heard the following expert witnesses:

58.1 Flooring:

- a) Dr Malcolm Bailey of Radlett Consultants for SSMC.
- b) Professor Peter Robery of Robery Forensic Engineering Ltd.

58.2 Paintwork:

- a) Alan Fenwick of Fenwick Inspection Services Ltd for SSMC.
- b) Dr John Ashworth of John Ashworth & Partners Ltd for the Council.
- c) Simon Clarke of Sandberg Consulting Engineers for Interserve.

58.3 Quantum:

- a) Nick Soady of RPA Quantity Surveyors Ltd for SSMC.
- b) Adrian Aston of Naismiths Ltd for the Council.
- c) David Ellis of FTI Consulting LLP for Interserve.

59. I shall refer to their evidence as necessary below on an issue-by-issue basis.

THE FLOORING CLAIM

THE SPECIFICATION

60. The Council specified that the concourse flooring should be designed and built in accordance with the Guide to Safety at Sports Grounds, known as the Green Guide, and in accordance with all relevant British and European standards. The relevant extracts from the Green Guide provide:

“8.6(d) The flooring of concourses should be slip-resistant, in particular areas where spillage is likely (for example, around catering outlets), and in areas where rainwater can be tracked in from vomitories and external areas.

11.7(b) As for all areas of spectator accommodation, gangways in seated areas ... should be even and free from trip hazards; and their surfaces should be slip-resistant.”

61. The relevant British Standard is BS8204-2:2003 “Screeds, bases and in-situ floorings”, which was published in 2003. Part 2 deals with concrete wearing surfaces and gives the following guidance:

“6.3 Slip resistance

The flooring should be finished to produce a reasonable slip resistance for the expected use. Any of the following methods may be used, provided that the slip

resistance [PTV (pendulum test value)] of the floor surface is not less than 40 when tested by the method described in BS7976-2:

- trowelling
- grinding the hardened surface to a fine-textured finish;
- mechanically roughening the hardened surface, e.g. by shot blasting;
- trowelling in, or incorporating in the concrete or screed material, slip-resistant granules ... which should remain exposed at the floor surface;
- providing slip-resistant inserts in the surface (for small areas only, e.g. ramps and stair-tread nosings).”

62. Plainly, a concourse in a stadium used for winter sports in south Wales is likely to get wet. Even where covered, spectators can be expected to carry rainwater in to the stadium on their shoes and clothing. Accordingly, I accept SSMC’s argument that the specification required the flooring to have a slip resistance of at least 40 in both wet and dry conditions.

THE CONSTRUCTION OF THE CONCOURSE

63. Interserve constructed a power floated concrete floor. Mr Edmonds recalls that Interserve’s designers advised that such a floor would, if properly managed and maintained, provide a satisfactory surface within the budget available.
64. A progress meeting was held on site on 24 August 2004. Paragraph 3.6 of the minutes recorded that Messrs Joseph and Noonan raised their concerns as to the slipperiness of the concourse. Interserve responded that it would test the floors in both wet and dry conditions.
65. On 11 February 2005, Jacobs Babtie carried out slip-resistance tests upon Interserve’s instructions. That testing reported that the risk of slipping was low in dry conditions but low to moderate in wet conditions. The PTV readings obtained ranged from 55-76 in dry conditions and 20-75 in the wet. The testing presented a mixed picture. No problem was identified in one of the test areas in the east stand or in the balconies in the north, south and east stands, where even in the wet the PTV was between 41 and an excellent 75. In other areas, wet PTV readings were at or below 40, and in some instances significantly so:

Area	Dry	Wet
West stand 1A	59	40
West stand 1B	60	36
West stand 1C	60	40
West stand 1A	59	26
West stand 1B	55	25

West stand 1C	56	23
North stand A	60	33
North stand B	66	30
North stand C	73	37
East stand 1A	69	20
East stand 1B	66	20
East stand 1C	68	24
South stand A	65	33
South stand B	71	25
South stand C	70	25
West stand balcony A	60	31
West stand balcony B	60	24
West stand balcony C	60	25

PROBLEMS WITH THE SURFACE

66. A number of slipping accidents were reported following the opening of the stadium. The first recorded injury was sustained in March 2006. The brief details of the accidents consistently recorded that the accidents happened in wet conditions.
67. Concerns were raised with Interserve about 12 months after Practical Completion. Mr Keepings inspected the concourse flooring and noted that it was very dirty and polished in appearance. He advised as to proper maintenance and specifically that slip resistance would be regained by aggressive scouring with rougher cleaning pads. Likewise, Mr Edmonds says that it became clear from his conversations with SSMC personnel that it had no proper system in place for keeping the flooring safe. He also stressed to SSMC that it needed to take responsibility and, specifically, that it needed to clean the floor properly. Mr Keepings noticed a marked improvement in the cleanliness of the terrace steps and walkways on later visits and assumed that SSMC had improved its maintenance regime.
68. The issue became more critical after a particularly wet game in October 2008. Mr Davies wrote to the Council on 10 October 2008 explaining that four supporters had needed medical attention after slipping on wet concourse flooring. He set out SSMC's concerns that the condition of the flooring exposed the company to the risk of both civil claims and criminal prosecution.
69. The Council sought advice from Gardiner & Theobald as to whether the flooring was built in accordance with the contractual specification. Meanwhile, SSMC arranged for testing to

be carried out by Microgrip in November 2008. Microgrip recorded PTV values of between 12 and 14 in wet conditions. It concluded that such readings posed a high risk.

70. On 3 December 2008, Gardiner & Theobald advised the Council that the budget price for works to roughen up the ground floor concourse flooring (being some 4,530m²) to improve slip resistance was £80,000 to £85,000.
71. On 8 January 2009, Mr Davies wrote to the Council. Referring to the Microgrip findings, he wrote:

“Given that those test results show a significant reduction in the slip resistance of the flooring (flooring which was not of adequate slip resistance from the outset and which has, as would be expected, progressively deteriorated with time), and that this will lead to an increased risk of slip related accidents, the Board of the Stadium Management Company has decided that immediate action is required to protect the Company and themselves from potential civil and criminal claims ... It is now felt that the risk is unacceptable and that immediate action has to be undertaken.”
72. Mr Davies acknowledged that the Council had commissioned a consultant to advise but complained of continuing delays in obtaining the report. The letter added:

“[The Directors] therefore have little confidence, given these circumstances, that the Council’s response in both receiving the final report from the consultant and then acting upon it will be undertaken in an acceptable timeframe.

Therefore, [SSMC] has resolved that one of the contractors from the list already provided to you, Microgrip, be appointed by [SSMC] to commence the works immediately. Furthermore, [SSMC] has today instructed its legal advisors to recover the costs associated with these works from [the Council] and you will be hearing from them in due course.”
73. On the same date, SSMC’s solicitors intimated a potential claim against the Council. A formal letter of claim was to follow shortly.
74. The Council responded on 12 January 2009. It noted SSMC’s decision to commission the necessary remedial work. It observed that it shared SSMC’s concerns as to health and safety but that it was not aware that anything had changed from the previous October when the Safety Advisory Group was satisfied with the mitigation steps being taken (namely the use of barrier matting, the deployment of stewards to mop up surplus water and spillages, the erection of warning signs and a policy that advice be given by stewards). The Council stressed that it had already commissioned an independent expert report on the issue and that until it was received it would not be possible to identify whether there were grounds for action against the building contractor. Any immediate remedial work would, it argued, be premature in those circumstances.
75. On 15 January 2009, SSMC’s solicitors sent a letter before action to the Council in respect of the flooring issues. It stressed that this was a last resort but nevertheless necessary in view of the health and safety issues. The solicitors pointed out that not only had a number

of spectators suffered injuries but a letter before action had been received from lawyers acting for a spectator who suffered a slipping accident. SSMC did not ask that the Council procure the carrying out of further works by Interserve. Instead, SSMC put the Council on notice that it intended to carry out the remedial work immediately and claim the cost through legal proceedings. Further, it complained that the Council had failed to agree SSMC's proposal for the joint instruction of an expert.

76. Jacobs tested the flooring in January 2009 upon the instructions of the Council's consultants, Makers Parking Limited. They collected data in both the "as found" condition and then after cleaning. The PTV readings were as follows:

Area	As found		After cleaning	
	Dry	Wet	Dry	Wet
Bar area 1	75	18	92	19
Bar area 2	73	12	87	12
Access 1	98	17	94	18
Access 2	67	28	92	43
Access 3	93	18	100	21
Access 4	109	19	110	20
Access 5	106	29	105	31
Access 6	83	17	102	21
Access 7	69	18	108	26

77. On 3 February 2009, Makers reported on Jacobs' findings. They concluded that while there was a low risk of slipping when the floor was dry, the risk was moderate to high in wet conditions. Slip resistance was only marginally improved by aggressive cleaning. Makers recommended potential mitigating measures. One suggestion, being the use of barrier matting in wet conditions, was impractical save as a short-term measure to mitigate the risk of slipping accidents. The other recommendations required remedial works:
- 77.1 Enclosed vacuum ball blasting in order to profile the concrete, at an approximate cost of £5-8/m².
- 77.2 Controlled acid etching, at £7-9/m².
- 77.3 An applied resin-coating system, at £12-18/m².
78. Mr Dinnick immediately forwarded the Makers report to Mr Davies and to Gardiner & Theobald. He correctly observed that it did not deal with the question of breach. It did, however, provide the raw data to support a claim that the slip resistance of the floor was inadequate and that there was therefore an arguable breach of the duty to design and construct a floor in accordance with the contractual specification. Mr Dinnick pointed to the "significant" deterioration in slip resistance since the 2005 tests and suggested that

such deterioration taken with Jacobs' findings after cleaning indicated that there might be an issue with the maintenance arrangements.

79. Meanwhile, on 9 February 2009 Gardiner & Theobald advised the Council that there was "limited value" in writing to Interserve since they had made their position clear, namely that they provided a concrete slab as required and that this was not a design issue but a question of poor maintenance.
80. On 11 February 2009, the Council's solicitors observed that the question of liability was not clear and that there was no expert evidence directly addressing that issue. It added that SSMC had not itself produced expert evidence on the point. The Council proposed a course of action to resolve issues:
 - 80.1 First, it proposed the joint instruction of a further expert thereby responding to a point that had been levelled against the Council in the letter before action. Such expert would presumably address issues of liability, although the Council consulted SSMC both as to the terms of reference and its suggestion that they also seek to include Interserve in the joint instruction.
 - 80.2 Secondly, it asked meanwhile that SSMC continue the management strategies agreed with the Safety Advisory Group.
 - 80.3 Thirdly, it asked for details of the prevailing weather conditions at the time of the accidents reported to date.
 - 80.4 Fourthly, the Council said that it would escalate matters with Interserve.
81. On 2 March 2009, through Gardiner & Theobald, Interserve was asked to respond to SSMC's complaints. The agents made plain that they would not be issuing a Notice of Completion of Making Good Defects until the flooring issue had been resolved. Further, they invited Interserve to agree to the joint instruction of an expert with the Council and SSMC.
82. SSMC's lawyers only responded to the letter of 11 February on 9 April 2009. It was something of a holding letter and it was said that a more formal letter would follow. SSMC declined to take up the suggestion of the joint instruction of a further expert, pointing out that the Council had itself declined SSMC's similar proposal in late 2008. SSMC said that it was "not prepared to prolong matters any further" and that it was finalising the tender process in order that works could proceed as soon as the season ended. Meanwhile, SSMC was said to be progressing its intended litigation and instructing its own expert to report on liability issues.
83. On 22 April 2009, SSMC sent Mr Joseph's detailed analysis to the Council. It provided a useful exposition of the issues and argued cogently that there was a proper claim against Interserve and therefore in turn a claim against the Council for its failure to enforce its rights under the building contract.

84. SSMC's contractors undertook remedial work in June 2009. Slip-resistant resin coatings were applied at a cost of £105,477 plus VAT. From the evidence before me, SSMC's solicitors did not first revert with the promised fuller response to the letter of 11 February 2009, nor did they provide a copy of any independent expert opinion on the liability issues.

EXPERT EVIDENCE

85. Dr Bailey and Professor Robery have very different experience and expertise:
- 85.1 Dr Bailey has vast experience in slipping accidents. He led research in the 1980s into the mechanism of slipping in wet conditions and the factors that influence the slipping characteristics of a wet floor surface. His research was incorporated into the British Standards and he is chairman of BS8204. He is a former chairman of the European Standards Committee for harmonising slip-resistance testing throughout Europe. He has significant experience in testing slip resistance with the pendulum slip tester; indeed, he is chairman of the British Standards Institute's Working Group for B/556 which drafted the BS7976, the Standard for the Operation and Calibration of the Pendulum Slip Tester. He is also the author of a useful 2009 paper, "Floor Slip Potential or How to Assess or Specify your Floor."
- 85.2 Professor Robery is an expert in cement and concrete technology. He is a former President of the Concrete Society and a visiting professor in the School of Civil Engineering at the University of Leeds where he teaches post-graduate engineering students about concrete technology.
86. Dr Bailey explained that the appropriate level of slip resistance will depend on the anticipated activity. His guide explains:
- "... people are not only different in their need for slip resistance but require different levels of slip resistance from different pedestrian activities. In relation to walking in a straight line, tests show that 50% of the population requires less than 0.19 coefficient of dynamic friction. The other 50% requires somewhere between 0.19 and 0.36. While most people require less than 0.30, one person in a million may require 0.36 and it is upon this latter statistic that the figure of 36 Pendulum Test Value is currently based.
- However, normal straight forward pedestrian activity includes in addition such things as stopping suddenly and turning. These increase the frictional demand and the one in a million figure is increased to 0.39 from which the 40 Pendulum Test Value is derived."
87. Helpfully, Dr Bailey's guide set out the slip-resistance requirements for normal walking activity:

Number of people	Minimum required PTV
1 in 2	0.19
1 in 20	0.27
1 in 200	0.31
1 in 10,000	0.34

1 in 100,000	0.38
1 in 1,000,000	0.40

88. Dr Bailey relied on the test results obtained by Jacobs Babtie in February 2005, Microgrip in November 2008 and Jacobs in February 2009. He commented that his report was desk based and that he would wish to inspect the stadium for himself and take his own slip-resistance readings should he be required to attend court to give evidence in the case. Dr Bailey was plainly uncomfortable that he had been called to give evidence upon a report written without the opportunity to carry out his own testing. That said, by the time of the trial he had visited site. Of course, the flooring had long since been altered in order to increase its slip resistance and further testing was pointless.
89. Noting the different findings upon the three site inspections, Dr Bailey explained that it is not possible to make direct comparisons between test results unless they were taken in exactly the same places on different occasions. He could not therefore say with certainty whether the flooring had deteriorated or whether the apparent reduction in wet slip resistance between 2005 and 2009 was merely coincidental. Nevertheless, Dr Bailey observed that while three of the eight areas tested in 2005 were well below 40 in wet conditions, all nine areas tested were in 2009. Indeed, seven of the nine areas tested in 2009 had a PTV below 20 in wet conditions. Dr Bailey noted that thorough cleaning improved the wet slip resistance in the 2009 test, although in only one test area was the improvement sufficient to exceed the recommended PTV of 40.
90. Dr Bailey considered that mistakes were made in the testing by Jacobs Babtie / Jacobs in that the wrong type of rubber was used in the pendulum test and unnecessary temperature corrections were made to the raw data. Notwithstanding these issues, he concluded that in areas the flooring was such as to present a serious hazard to pedestrians in wet conditions. Further, on the balance of probabilities, the wet slip resistance had deteriorated as the floor became “polished up.”
91. The experts agreed that maintenance is important. Indeed, BS8204-2:3003 provides at section 6.3:
- “Slip resistance is only retained if the floor is cleaned correctly by regular washing and cleaning with suitable cleaning products and techniques. Generally, the more slip resistant the floor when wet, the more difficult it is to clean. Existing floor surfaces that have become slippery may be roughened by mechanical treatment, e.g. shot-blasting the surface. Alternatively, a resin coating containing hard angular granules of natural or synthetic material may be applied to a cleaned and textured floor surface to increase slip resistance.”
92. Heavily used concrete floors have the tendency to polish up and become more slippery. Where they do, slip resistance can be restored as suggested in BS8204-2:2003.

93. In his report, Dr Bailey considered Makers' four solutions to the flooring problem. Leaving aside the impractical suggestion of barrier matting, Dr Bailey considered the other three options:
- 93.1 Enclosed shot-blasting was, he reported, attractive from a cost point of view but might not provide an acceptable finish. The treated floor would be liable to polish up again. While an increased texture depth would improve its life, it would also make it more difficult to clean. Further it would involve cutting through the hard but thin wearing layer of the concrete.
 - 93.2 Acid etching would give a much lower texture depth and therefore struggle to achieve the required wet slip resistance. Again, the surface would tend to polish up unless maintained with a special cleaning solution. Further, the etch solution could not be disposed of in the drainage system.
 - 93.3 Applied resin coating would be the most expensive but also the safest and most desirable option from both an aesthetic and maintenance viewpoint.
94. Dr Bailey and Professor Robery discussed the case in August 2018. In their joint report, they concluded that it was unrealistic to expect any floor to maintain its skid resistance in perpetuity when exposed to foot traffic and spillages. Indeed, on the balance of probabilities, the slip resistance had deteriorated over the years as the flooring polished up. The experts then considered the works undertaken by SSMC in 2009. They commented:
- “24. The experts note that [SSMC] used a vacuum shot blast to prepare the entire area of concrete floor surface and then applied a resin flooring with added grit to provide the slip resistance required. The experts agree that this approach is one solution, but it might be considered betterment over what had been agreed in the Contract as a power-floated concrete surface.
 25. The experts agree that a lower cost alternative to a resin flooring system is the combination of regular and proper maintenance cleaning to remove grease and spillages, with occasional light tooling using vacuum shot blast equipment in selected ‘stubborn’ areas [that] are prone to wetting or spillages when they may have low slip resistance.
 26. The experts agree that use of repeated shot-blasting on a power-trowelled concrete surface cannot be regarded as a long-term solution where the combination of regular and proper maintenance and an occasional light tooling proves inadequate to maintain the required skid resistance.
 27. In areas with particular heavy trafficking, and where the skid resistance proves difficult to maintain, local treatment with a resin flooring system may be needed.”
95. Asked in cross-examination whether he would be surprised at the suggestion that the resin-flooring solution was based on his advice, Dr Bailey replied that he would. He was not asked for specific advice on a remedial solution. He confirmed that shot-blasting was essentially a temporary solution; it was a one or two-shot system that would eventually ruin the floor. Dr Bailey agreed that one could not regard a resin coating as the appropriate solution until a combination of regular and proper maintenance and light tooling proved to be inadequate.

96. Professor Robery's report did not take matters further than his joint report. In his oral evidence, he deferred to Dr Bailey's obvious expertise in slip resistance. Indeed, he explained that they had worked together on other cases in which Dr Bailey had covered the slip-resistance issues while he had reported on other issues.
97. Professor Robery agreed with Dr Bailey that shot-blasting could not be repeatedly undertaken. He said that if used more than twice, the surface would deteriorate. It was, however, the first option to consider and might be effective. As to the betterment point, Professor Robery said that the specification in this case was typical of a warehouse floor. A resin-coated floor was betterment compared to a power-trowelled floor.

FINDINGS OF FACT

98. I make the following findings of fact:
- 98.1 As originally constructed, the concourse flooring did not offer uniformly reasonable slip resistance in wet conditions. Testing in February 2005 showed good resistance in parts of the stadium but that in other areas the PTV was as low as 20 when the floor was wet, meaning that the flooring posed a risk of slipping to almost half of the spectators using those areas. As would be expected in view of the low PTVs, there were a number of slipping accidents in wet conditions when the stadium first opened.
- 98.2 Initially, SSMC failed properly to maintain the flooring. Proper maintenance required abrasive cleaning with rough cleaning pads. The failure of maintenance meant that the surface tended to polish up.
- 98.3 On the balance of probabilities, the slip resistance deteriorated as the flooring polished up. That said, testing in 2009 showed that thorough cleaning did not consistently and of itself significantly improve the slip resistance of the floor.
- 98.4 On the balance of probabilities, slip resistance could have been improved by the combination of an improved maintenance regime coupled with shot blasting.
- 98.5 The application of an anti-slip resin coating was an effective, but more expensive, solution to the problem.

THE FLOORING CLAIM AGAINST INTERSERVE

99. I have, of course, already found that the claims under clauses 16.2-16.3 did not survive the issue of the Notice of Completion of Making Good Defects [see paragraphs 19-36 above]. Nevertheless, I briefly consider the merits of the claims under clauses 16.2 and 16.3 lest I am wrong as to the effect of clause 16.4.

The basis of claim

100. It is central to any claim under clauses 16.2 and 16.3 to consider any schedules of defects or instructions relied upon by SSMC. Very sparse particulars were, however, pleaded of these claims. In respect of both the flooring and paintwork claims, SSMC pleads, at paragraphs 89(6) and 93(5) of its Particulars of Claim, that Interserve was "in breach of its obligations to identify and remedy defects after practical completion as set out in clauses 16.2 and 16.3."

101. Interserve sought further particulars. By its reply, provided on 17 October 2017, SSMC pointed to a snagging list prepared following Interserve's inspection on 6 March 2006 and to Faber Maunsell's Report on Building Fabric Defects dated October 2006. It was tentatively suggested that such documents corresponded with the draft schedule and the schedule of defects referred to in clause 16.2. While the Interserve list did not make any reference to the slipperiness of the flooring, the document from Faber Maunsell did. That said, it was a document prepared not by or for a party to the contract but by a consultant acting for SSMC. It was also out of time to qualify as the Employer's response to Interserve's draft schedule of defects.

102. At paragraph 30 of the reply, SSMC then pleaded:

“In so far as the Second Defendant did not prepare a schedule or draft schedule of defects post Practical Completion, it should have done so, identifying all of the defects the subject of these proceedings. The Claimant relies upon any failure in this respect as a breach of clause 16.2 for the purposes of paragraph 93(5) of the Particulars of Claim (and/or paragraph 89(6), in relation to the flooring defects).”

103. Thus, despite its best efforts, SSMC has not pointed to any entry on a final schedule of defects delivered under clause 16.2 that it argues was not made good. Accordingly, the claim under the Defects Liability provisions essentially boils down to an allegation that Interserve failed to identify the alleged defects. Had it done so, it would have been obliged to list the defects in a schedule and then to have made good.

104. As to any instruction under clause 16.3, SSMC pleaded at paragraph 41 of the reply:

- “(1) The Claimant infers that the First Defendant instructed the Second Defendant to remedy the defects identified in the various snagging lists.
- (2) Further or alternatively, the issue of a snagging list to the Second Defendant is itself an implicit instruction to remedy the defects identified in it.
- (3) The correspondence referred to elsewhere in these replies indicates that Gardiner & Theobald, acting as Employer's Agent under the building contract, instructed the Second Defendant to remedy these defects.”

105. SSMC has not identified any specific instruction given by the Council on or before 14 April 2006 (being 14 days after the end of the Defects Liability Period) in respect of the flooring. In the absence of a qualifying instruction, there was no obligation to make good under clause 16.3 and, accordingly, there can be no liability under that sub-clause. Indeed, in closing, Mr Mort focused his argument on clause 16.2.

The alleged failure to identify defects

106. There was, in my judgment, a sound claim in respect of the flooring:

106.1 The concourse flooring was defective within the meaning of clause 16 in that it had inadequate slip resistance in wet conditions.

106.2 Such defect appeared during the Defects Liability Period.

- 106.3 The defect was due to Interserve's failure to comply with its obligation under the building contract to design and build flooring in accordance with the contractual specification; specifically, its obligation to provide a slip-resistant surface (as required by the Guide to Safety at Sports Grounds) with a PTV of at least 40 in both wet and dry conditions in accordance with paragraph 6.3 of BS8204-2:2003.
- 106.4 Interserve was in breach of its obligation under clause 16.2 to identify and list the defect in a draft and then final schedule of defects. But for such breach, Interserve would have been obliged to have made good the defect.
107. There was, therefore, a good claim for breach of the original building contract. Such claim was, however, brought out of time. Further, there was a good claim for breach of clause 16.2, albeit such claim cannot now be pursued in view of the effect of the Notice of Completion of Making Good Defects.

THE FLOORING CLAIM AGAINST THE COUNCIL

A Latent Defect under clause 7.1

108. In my judgment, the slipperiness of the flooring at 22 April 2005 was a Latent Defect within the meaning of the 2006 agreement:

108.1 Existing defect:

- a) Proof of a breach of the building contract is not sufficient of itself to establish a defect within the meaning of the lease. I therefore consider the flooring not against the contractual standards but by reference to the wider question of whether there was a defect in the stadium.
- b) The test results obtained by Jacobs Babbie in February 2005 are the best evidence of the state of the flooring on 22 April 2005. These tests recorded PTVs as low as 20 in wet conditions, indicating that almost one half of all pedestrians would be expected to have difficulty in maintaining their footing.
- c) Such low slip-resistance values in wet conditions gave rise to a foreseeable risk of injury and accordingly I am satisfied that the slipperiness of the flooring was a defect within the meaning of the lease.
- d) Such defect was plainly in existence at 22 April 2005.

108.2 Not visible:

- a) In order to be a Latent Defect as defined, it would also be necessary for SSMC to establish that the slipperiness of the floor was not "visible" at 22 April 2005. The contractual test is not whether the existing defect was apparent, or reasonably apparent, upon testing but simply whether it was visible.
- b) In my view, the slipperiness of this concourse flooring was not visible at 22 April 2005. While witnesses later describe it as having a dirty and polished appearance, the contractual reference date was before the stadium was handed over to SSMC. To the naked eye, this was simply unused concrete flooring. It was only on expert testing, or perhaps on walking over specific areas of the floor in wet conditions, that the defect might have become apparent.

108.3 Caused by defective design, workmanship or materials:

- a) Finally, it is necessary for SSMC to prove that such defect was caused by defective design or defective workmanship or materials used during the construction of the stadium.
- b) In my judgment, the failure to provide a floor that was capable of providing a reasonable level of slip resistance in wet conditions was a failure of design, workmanship or materials. The failure was probably one of design, but if the design was not at fault then it must follow that defective workmanship or materials led to the failure of the design to deliver a reasonably safe floor.

A snagging list item under clause 7.2

109. SSMC relies on a snagging list drawn up by Faber Maunsell in October 2006 which queried the slip resistance of the flooring in all four stands. I repeat my earlier observation that this was not a list prepared by the parties to the building contract or their agents, but rather by SSMC's consultants. The potential claim under clause 7.2 does not, however, advance SSMC's case further in view of my finding that the flooring comprised a Latent Defect.

The Council's rights against Interserve

110. Accordingly, the Council was under a duty pursuant to clause 7 of the 2006 agreement to take "all reasonable steps to enforce its rights" in respect of the defective flooring. The Council had two potential claims against Interserve:

110.1 First, the flooring as originally constructed failed to comply with the contractual specification in that it was not reasonably slip resistant in wet conditions. Specifically, in areas, it fell significantly below the required threshold of 40 on a PTV test. Accordingly, Interserve was in breach of its core obligation to design and build the flooring in accordance with the contractual specification.

110.2 Secondly, the flooring was also a defect within the meaning of clauses 16.2 and 16.3. Interserve should therefore have identified and listed the slipperiness of the flooring in its Schedule of Defects served under clause 16.2 of the building contract. There was also a time-limited right under clause 16.3 to issue an instruction to make good the defect but this is academic to the claim against the Council since such right had expired by the time that the parties entered into the 2006 agreement.

111. For the reasons already explained:

111.1 Until 26 May 2011, the Council was entitled to seek to enforce either the clause 16 obligations or the primary contractual obligations.

111.2 Between 26 May 2011 and 14 June 2012, the Council was entitled to seek to enforce the primary contractual obligations, but not clause 16.

111.3 Following the 14 June 2012 agreement, the Council had no remaining rights to enforce in respect of the concourse flooring.

Breach of clause 7

112. I consider the question of breach in respect of three periods:

- 112.1 21 July 2006 to June 2009, the period from the deed which created the obligations under clause 7 to the remedial work carried out by SSMC.
- 112.2 June 2009 to 14 June 2012, the period from such work to the settlement agreement.
- 112.3 14 June to 4 April 2017, the period from the settlement agreement to the issue of these proceedings.

21 July 2006 to June 2009

113. In my judgment, SSMC has failed to prove that the Council failed to take all reasonable steps to enforce its rights under the building contract during this period:
- 113.1 Concern as to the slip resistance of the flooring in wet conditions appears only to have risen to the fore during the 2008/9 football season. The measures taken by the Safety Advisory Group in October 2008 provided some short-term mitigation.
- 113.2 After poor test results were obtained in November 2008, the Council instructed an independent consultant to report on the issue. While the Makers report indicated that there was a problem, it did not address issues of liability.
- 113.3 Faced with the letter before action from SSMC in January 2009 and Interserve's continuing denial of liability, the Council was right to put SSMC's arguments to Interserve and, meanwhile, to propose that further expert guidance be obtained addressing the issue of liability. The Council's proposal to instruct an expert jointly with both SSMC and Interserve was sensible.
- 113.4 There was then an 8-week delay before SSMC responded to the Council's letter. The Council's suggestion of a joint instruction was rebuffed. SSMC indicated its intention to instruct its own expert, to respond more fully and to commission the necessary remedial works. The works were then carried out in June 2009.
- 113.5 SSMC was right to regard the flooring as a health and safety issue which called for some sense of urgency and which needed to be resolved before the 2009/10 season. The obvious window of opportunity for remedial works was the summer when the stadium would be in less demand for sporting fixtures, although I recognise that stadia are often used during the summer months to host other events.
- 113.6 It was not, however, reasonable to expect the Council to issue legal proceedings or to refer any dispute to adjudication without first obtaining expert evidence. By the time that the Council obtained the Makers report, SSMC had made clear that it would carry out the necessary remedial work and that its threatened claim against the Council was concerned with recovering the cost of such work rather than seeking to enforce the Council's liability to require Interserve to carry out the works.
- 113.7 Further, by 9 April 2009 (when SSMC's solicitors responded to the Council's letter of 11 February), it was clear that Interserve was denying liability and that, as both the Council and SSMC recognised, there was a need to obtain expert evidence dealing with the liability issue. It was not reasonable to think that legal action or adjudication proceedings could realistically have required Interserve to carry out the works before the start of the 2009/10 season.

June 2009 to 14 June 2012

114. Once the remedial work had been carried out, the urgency had been addressed. Thereafter any action to recover the costs of the remedial work was best brought by SSMC:

- 114.1 The work had been paid for by SSMC and it had a direct cause of action against Interserve pursuant to the collateral warranties.
- 114.2 While the Council could pursue a claim against Interserve for breach of the building contract, it had not suffered any loss. Its case would have had to have been put on the convoluted basis that it was itself liable to SSMC for the cost of the remedial work pursuant to clause 7. Such plea was open to challenge.
- 114.3 In any event, the obligation was only to enforce the Council's rights and not to act, as Mr Hussain put it, as SSMC's debt collector.
115. It is not alleged that the actions of the Council's agent in issuing the Notice of Completion of Making Good Defects on 26 May 2011 was itself a breach of the obligation under clause 7. In my judgment, this was probably wise since, as already explained, the notice did not affect the Council's ability to enforce the core obligation under the building contract to design and construct the concourse in accordance with the contractual specification.
116. Clauses 7.1 and 7.2 of the 2006 agreement expressly envisaged that the Council might enter into such settlement agreement as it "reasonably considers appropriate having regard to all the circumstances of the case." This was not, however, a licence to settle at all costs. It was a contractual discretion that was to be exercised reasonably and as an adjunct to the Council's key obligation to take "all reasonable steps to enforce its rights" under the building contract.
117. The burden is on SSMC to prove a breach of clause 7. Thus, it is for SSMC to prove on the balance of probabilities that:
- 117.1 in entering into the 2012 agreement, the Council did not enter into a settlement that it reasonably considered appropriate having regard to all the circumstances of the case; and
- 117.2 in so doing, it failed to take all reasonable steps to enforce its rights under the building contract.
- SSMC has not grappled with these issues but simply contended in general terms that the Council could and should have sought to enforce its rights by adjudication and/or litigation.
118. I therefore focus on the position as at 14 June 2012:
- 118.1 There was a historical issue in respect of slipperiness. Testing in 2005, 2008 and 2009 had indicated that the flooring did not provide adequate slip resistance in wet conditions and that Interserve was likely to be found to be in breach of the building contract.
- 118.2 The issue had been resolved by works undertaken by SSMC in 2009.
- 118.3 In enforcing its rights under the building contract, it was therefore appropriate to press Interserve for a suitable allowance for the reasonable cost of the remedial works.
- 118.4 Upon the expert evidence before me, it was reasonable to settle the claim on the basis of the likely costs of shot blasting rather than holding out for the full costs of a

resin-coated system which involved some element of betterment over the fairly basic contractual specification in this case.

- 118.5 The Council had expert evidence that indicated a range of potential remedial costs for shot blasting of between £5 and £8/m².
- 118.6 The 2012 agreement did not allocate a particular sum against the flooring. Gardiner & Theobald had proposed an allowance of £33,975 when giving Notice of the Completion of Making Good Defects in May 2011. Such sum was calculated on the basis of a measured area of 4,530m² at a cost of £7.50/m². It may well be that a lesser allowance was made in 2012 since the total discount agreed of £47,500 covered a number of issues. This, however, is speculation and SSMC has not proved the amount of the allowance made by, for example, proof of the proper value to be attributed to the other settled issues.
- 118.7 The issue is therefore whether in agreeing the allowance of £47,500 for the flooring and other defects, the Council was in breach of its obligation under clause 7 to take all reasonable steps to enforce its rights in respect of the flooring defect.
- 118.8 It was reasonable to settle the flooring issue in return for some allowance against the final account that reflected not just the likely reasonable remedial costs but also the obvious benefits of settling the dispute rather than pursuing a claim through litigation or adjudication.
- 118.9 In my judgment, SSMC has failed to prove on the balance of probabilities that, in entering into the 2012 agreement, the Council either:
- a) agreed a settlement agreement that, having regard to all the circumstances, it did not consider reasonable; or
 - b) failed to take all reasonable steps to enforce its rights under the building contract.

14 June 2012 to 4 April 2017

119. For the reasons already explained, the Council did not have any rights to enforce in respect of the concourse flooring after 14 June 2012.

Conclusion

120. Accordingly, I dismiss the claim against the Council in respect of the flooring.

THE PAINTWORK

THE PLEADED CASE

121. Under the heading “Defects in the paint applied to the steelwork”, SSMC pleads at paragraphs 91-92 of its Particulars of Claim:

“91. Since about 2008, the steelwork both externally and internally has suffered increasingly from:

- (1) paint delamination on external tubular sections;
- (2) associated corrosion.

92. In addition since 2008 the Second Defendant and/or contractors or subcontractor acting on its behalf, have attempted to remedy the defects identified above, but badly.”

122. At paragraph 93 of the Particulars of Claim, six allegations of breach of the building contract were made:

122.1 Interserve failed to apply three coats of paint.

122.2 Interserve caused damage to the steel and paintwork during erection.

122.3 The paintwork did not have a life to first maintenance for corrosion purposes of 15 years but had started to corrode within approximately three years of Practical Completion.

122.4 Interserve had failed properly to prepare the steel and apply the paint.

122.5 Interserve’s remedial attempts were “inept.”

122.6 Interserve had failed to identify and remedy defects as required under clauses 16.2 and 16.3 of the building contract.

THE SPECIFICATION

123. The original specification provided for a three-coat solution for the exterior exposed steelwork:

“Shop primer: [Zinc rich Epoxy Primer] – Dry film thickness: [80] micrometres

Shop intermediate coat: [High build Epoxy MIO] – Dry film thickness: [100] micrometres

Shop top coat: [High build Epoxy MIO] – Dry film thickness: [100] micrometres”

124. Interserve sub-contracted the structural steelwork, including the application of the paintwork system, to Rowecord Engineering Limited who initially proposed a system with a life to first maintenance for corrosion purposes of 25 years. Subsequently, when asked to find cost savings, the specification was reduced to 15 years and to two coats of paint on the external steelwork. Rowecord’s paint system was specified in conjunction with International Coatings Limited trading as Akzo Nobel. On 15 September 2003, Akzo Nobel proposed a two-coat system, being coats of Intercure 200 HS and Interfine 979 or similar, each applied to a thickness of 100 microns. As to the likely performance of the proposed system, Akzo Nobel advised:

“After the initial 5 years the percentage of breakdown due to mechanical damage, film build surface preparation would be less than 1% and subject to a technical inspection no remedial work would be required.

Subsequent inspection should be limited to areas of mechanical damage and previous remedial touch up where the coating was damaged back to bare metal.

After 10 years the percentage of breakdown expected would be no more than 1.5%. At this stage minor maintenance to affected areas will be required.

After 15 years the percentage of breakdown would be expected to be no more than 1% and subject to technical inspection no remedial treatment would be required.

After 20 years the percentage of breakdown would be expected to be no more than 3%. Minor maintenance to affected areas will be required.”

(For the avoidance of doubt, the discrepancy that Akzo Nobel appeared to expect a higher percentage of breakdown after 10 years than after 15 was in the original.)

125. After value engineering, on 18 September 2003, Interserve advised Gardiner & Theobald that the coating would provide “a minimum time to first major maintenance of 15 years.” Further, the contractual specification provided:

“The steelwork will be shot blasted and primed at works. The top finishing coat will also be applied. Once assembled on site, where appropriate, connection joints may be touched up prior to erection. The applied finish specification has a time to first maintenance for corrosion purposes of 15 years, however some discolouration of the paint due to sun degradation may be experienced prior to this time.”

126. The final choice of products for the external paintwork was agreed in January 2004 shortly before the coatings were to be applied. It was a two-coat system comprising a primer, Interzinc 52 HS to a thickness of 75 microns, and a top coat, Interfine 979 white to a thickness of 125 microns. The correspondence reveals that Interserve had some misgivings about the late change of coatings. On 27 January 2004, Akzo Nobel discussed the merits of both the earlier proposal and the final system. It observed that a life to first maintenance of 15 years was “asking very little” of either system and reassured Interserve that the final proposal to apply Interzinc 52 and Interfine 970 was a “far superior option” in terms of gloss and colour retention, resistance to “chalking” as a result of UV exposure, its site touch-up qualities and its protection against corrosion.
127. Messrs Edmonds and Keepings explain that Mr Noonan raised concerns about the reduced life to first maintenance and insisted that the steelwork should have been galvanised. This was, however, a matter of contract and the specification had been modified to reduce costs. Plainly, the Employer was only entitled to a painted system, albeit one that provided a life to first maintenance of 15 years.

THE WORKS

128. The steelwork was primed and painted off site at Rowecord’s works in order to optimise the environmental conditions. There was minor and localised transport and handling damage during delivery to and erection at the stadium. This was to be repaired on site. Mr Keepings observes, however, that Mr Noonan continued to raise concerns about the paintwork and that he seized on examples of handling damage such as chips and scratches rather than simply accepting that some such damage was to be expected and would be touched-up prior to completion.

129. On 16 March 2004, Mr Joseph visited the construction site. By his fax of 17 March, he commented on the generally high quality of workmanship, but then noted the following issues:

“The apparent ‘thinness’ of the paint finish with slight signs of rust
The workshop masking of areas which now require site painting
Damage to the paint finish”

130. Meanwhile, it appears that Interserve had its own concerns about the performance of Rowecord. On 13 April 2004, Interserve identified columns in the west stand and a number of beams, struts, braces and connection plates where only primer had been applied. Interserve pointed out that external cladding works were due to start that week. It observed:

“Bearing in mind that the paint specification is intended to give a period of 15 years to first maintenance, it is important that it is properly applied and desirable that surfaces are properly visible to the painter.”

Interserve added that it was important to protect areas of exposed steelwork caused by erection damage as soon as possible.

131. Various paint issues were identified during a site inspection by Mr Noonan on 17 August 2004. Mr Keepings’ handwritten note recorded that steelwork was “dirty and damaged [where it had been] dragged along [the] ground prior to and during erection.” A major concern was noted to be damage inside the inaccessible mating joints in the steelwork. The note added:

“Rowecord will need to submit immediate and robust proposals for repairs and will need to consider joint injection of a flexible waterproofing protection medium in order to protect against unseen damage.”

132. On 26 August 2004, Interserve wrote to Gardiner & Theobald in response to Mr Noonan’s concerns. It stated that Rowecord acknowledged that an amount of touching up and repair work would be necessary to repair damage caused in transit, storage and erection. It described the vast majority of the paint damage as “cosmetic.”

133. Some sample areas on the exterior tubular columns and bracing on the north stand were then prepared and touched-up in order to test the efficacy of the repair system. Akzo Nobel undertook a site visit on 2 September 2004. It found both the adhesion and cosmetic appearance of the exterior touch-up areas to be “first class” but observed that there was a notable difference between the original paint finish and the appearance of the repaired sections. Such difference was due to the effects of weather and airborne dust blowing around the site. The repair and touching-up of the interior paintwork was also found to be satisfactory, although there was again a difference in appearance. The paint supplier concluded that there should be “no problem” with the life-to-first-maintenance guarantees.

134. Against that, on 3 September 2004 Mr Joseph expressed concern that the paintwork was not being carried out in accordance with the original specification and raised the spectre

that, unless action were taken, the Swansea project had the potential to be a second “Stoke City AFC disaster.” This was apparently a reference to major painting problems at what was then the Britannia Stadium following its construction in 1997.

135. In any event, completion certificates evidence the completion of the touch-up work by mid-October 2004. Following a site inspection on 23 November 2004, Mr Noonan wrote that there were many quality issues resulting from:

- “- Discolouration
- Treated erection damage
- Untreated erection / post-erection damage
- Site preparation of surfaces for over painting
- Site touch up
- Unpainted (?) contact surfaces”

136. After observing that the steelwork had not yet been offered for acceptance, Mr Noonan addressed each of the issues that he had identified. Discolouration was removed with a damp cloth and was attributed to airborne pollution. Otherwise, erection and post-erection damage was in places yet to be treated. He added that, in places, there were:

“visible gouges in the protection where DFTs [dry film thickness] of less than half the QA values were recorded. This suggested that the protection coat had been damaged back to bare metal and only protected with an overcoat.”

It was also said that repairs had not been properly prepared in that a topcoat was in some instances applied over striations in the paint.

137. On 21 December 2004, Interserve accepted that there were some variations of colour. This was in part due to dirt and dust which was simply removed with a damp cloth. Another factor was also some difference in finish obtained between spraying in factory conditions and localised brush and roller touch up. After taking advice on the issue from its specialist subcontractors, Interserve confirmed that such differences in colour would fade over time.

138. On 3 January 2005, Faber Maunsell challenged Interserve’s assertion that the DFT readings on site showed adequate paint thickness. He added that rust staining and shading resulting from site touch-up work were not acceptable in finished works. He stressed that a uniform colour would be expected on handover and not simply at some time in the future.

139. On 1 February 2005, Interserve raised a number of concerns:

“From our cursory walk-around inspection, it was evident that besides a variety of paint chip repairs there are a few areas of extensive repetitive defect:

- a) Rusting arises to numerous beams/cleats.
- b) Paint crush/spalling to the head end of sundry bolts.
- c) Rust leach from a variety of plated/cleated joints.
- d) Paint missing to internal perimeter of drilled holes (currently evidenced by rusting of the bores to the ‘lifting points’).

- e) Rusting of turnbuckle and fork-end connections to the majority of the high-level steel rod ties.

With respect to the aesthetics of the current repairs it is unfortunate that the patching effect is grossly enhanced under sunny conditions. However, irrespective of lighting conditions, we are unable to accept the extent and variety of patching and shading that has arisen from the touch-up operation.

It is fair to suggest that this problem is largely restricted to the perimeter and over-roof steelwork. However, some areas of exposed internal steelwork also require attention.”

140. On 9 February 2005, Rowecord responded with its proposals for further remedial works. It suggested a three-week programme of work from the end of March, but observed that it was a question of waiting until the weather improved. Upon inspecting the site on 30 March 2005, Mr Noonan noted that remedial work to the paintwork remained outstanding and that incidences of rust staining were increasing.
141. On 14 April 2005, Interserve set out its proposals for remedial paintwork. It expressly acknowledged the “poor appearance” of the earlier repairs and that the position was unacceptable. It explained that it was investigating the cause of the discolouration with its specialist subcontractors in order to propose acceptable remedial work. The letter concluded:
- “Subject to receiving the results of their early trials we are currently unable to confirm a final proposal for remediation.
- Whichever form of remediation ultimately turns out to be the most appropriate, we are targeting completion by the end of June.”
142. On 4 May 2005, Interserve set out the details of the proposed remedial works in letters to both Rowecord and Gardiner & Theobald. In doing so, Interserve recorded that issues had arisen with colour variation, consistency of paint finish, uneven repair finish and rust leachate, primer bleed, yellowing of internal repairs and erection damage. Works started the following day.
143. Mr Noonan’s fax of 22 May 2005 was largely concerned with his deteriorating relationship with Mr Keepings. It did, however, include the following pertinent question:
- “How do you intend to deal with concealed damage such as that to the end plate to the raking member which, to both our horrors, was dragged along the ground before being fixed in place during that site visit when we were both on site together.”
144. On 25 May 2005, Interserve recorded that the Council had confirmed that the paintwork repairs to a sample area, being the lower half of the north elevation, were aesthetically acceptable. Work continued until September 2005. An isolated incidence of flaking paint on one column was identified in December 2005. Further problems with the paintwork were identified in early 2006. By their letter of 17 February 2006, Gardiner & Theobald indicated that the contractor was waiting for warmer weather before repainting.

145. On 28 April 2006, Mr Davies sent a draft report to the Council in respect of design-related defects and other defects not previously detailed in snagging lists. It included, at issue 9, an allegation that the external paintwork was beginning to flake off. Gardiner & Theobald responded on 13 July 2006 that it had visually inspected the steelwork and could not find any flaking paint.
146. In May 2006, Terry Noonan and Gwilym Joseph wrote a Project Review. They repeated the observation first made in August 2004 about the parallels with the position at Stoke City and added:
- “From the papers attached, it can be seen that the problem has been ongoing from the first site inspection (see fax dated 17th March 2004) to only a few months ago when in [Interserve’s] snagging list dated 6th March 2006, areas of exposed steelwork were listed as rusting and needed further painting.
- There are very complicated issues arising out of a number of remarkable decisions made to (sic) the paint specifications during the post-tender period which we feel is the crux of the matter.
- A strong case can be made against [Gardiner & Theobald] for allowing this situation to materialize, especially as [John Evans] was informed on the first site visit that rust was showing through the exposed steelwork in some areas.”
147. Mr Keepings responded on behalf of Interserve on 28 November 2006. He denied that dirt, algae and discolouration were defects and insisted that regular cleaning would enhance the appearance of the paintwork. He said that the areas of rusting were minimal and within the “permissible constraints of rust standards.” As a gesture of goodwill and with a view to the release of retention monies, Mr Keepings agreed that Interserve and Rowecord would attend site to undertake works to any areas of rust.
148. In February 2007 Mr Keepings wrote that all snagging matters had been completed, yet in late 2008 he liaised with Rowecord to arrange for yet further remedial work. Such work was done without any admission of liability and in order to secure the release of retention monies. Mr Keepings described his findings, at paragraph 29 of his statement:
- “Although there was rust to the steelwork, the total amount of rust in the stadium was minimal (below the 1% deterioration that was detailed in the Contract). The problem looked worse than it was simply because rust runs and the paint was white. Once these areas of staining were wiped away, it was clear that only a small part of the affected area actually had rust. If SSMC had complied with its maintenance obligations and cleaned the steelwork, it would have been clear to it that the rusting of the steelwork was only in limited areas and permitted under the Contract.”
149. On 28 November 2008, Interserve reminded the Council of its own maintenance obligations. Mr Keepings says that when he stressed SSMC’s own responsibility for maintenance to its maintenance manager, Graham Lewis, he replied that he would touch up areas that were within reach but ignore anything higher up. On a later visit, Mr Lewis

said that he had been instructed by SSMC not to touch up the steelwork at all because it was Interserve's responsibility.

150. On 10 February 2009, Interserve confirmed its proposals for the further remedial work that would be undertaken later in the spring or summer. The remedial scheme was said to be intended to reinstate the life expectancy of 15 years to first major maintenance. Mr Keepings stressed the Council and SSMC's own maintenance obligations:

“You will have noted from previous correspondence that the installation is not maintenance free for the 15-year life expectancy of the coating. Neither is it subject to free maintenance under the Contract whereby [the Council] have responsibility for the finished product. We both assume and expect that [the Council] and SSMC understand and accept their responsibilities in maintaining the facility.”

151. There were some issues with access to the stadium, but eventually paintwork repairs were carried out in the summer of 2009 and between June and November 2010.
152. As set out above, Gardiner & Theobald issued the Notice of Completion of Making Good Defects on 26 May 2011. It did not make any reference to outstanding or defective paintwork. In cross-examination, Mr Davies accepted that he could not say that the notice had been wrongly issued.
153. Further remedial work was undertaken in 2012 in respect of flaking paint. Mr Davies confirmed in his evidence that he was satisfied with that the repairs then undertaken and that there were no further issues with the paintwork until 2014.
154. In July 2014, SSMC identified further defects in the paintwork. The Council referred the matter to Interserve who responded, for the first time, that the extent of the defects was minor since it affected less than 1% of the steelwork and fell within SSMC's maintenance obligations. By e-mails sent on 30 October and 3 November 2014, Mr Edmonds denied liability and asserted that the level of deterioration of the paintwork some 9 years after completion of construction work did not reflect a failure of the paintwork system. He pointed out that it had been agreed at the tender stage that there would be maintenance costs for the paintwork.

EXPERT EVIDENCE

155. SSMC's paintwork expert, Mr Fenwick, carried out a site survey in November 2016. He reported:

“Scattered patches of coating failure are visible generally around the entire structure, including some rust rashing, attributed to low film build.

As at least 90% of the original coating is in good order it proves that where the coating was applied correctly over a properly prepared substrate the coating system was ‘fit for purpose’, however by the amount of damage caused during erection this system showed little resistance to the rigours of this operation and if the repairs had

been carried out over properly prepared surfaces within the climatic restraints stipulated in the product data sheets then these areas also should still be in sound condition.

Most of the premature failures of the coating system visible at this time are due to mechanical/handling/erection damage, the exception being the sharp edges of the roof H-beams, which is due to poor application.

Possibly 30 to 40% of H-Beam edges are prematurely failing which could probably have been avoided with good painting practice, i.e. application of a brush stripe coating being applied to these areas to ensure sufficient film build. (The cohesive force of the molecules in the coating causes the paint to pull away from the sharp edges leaving a low paint film build.)

Most dry film thickness readings are in excess of the required specification.

The touch up painting/repairs that have been carried out to date either during erection or later appear to have been done with scant regard to surface preparation. Some repairs show no feather back to sound areas and touch up with one coat of approximately half the specified thickness. It is difficult to know what material was used to carry out the repairs as visually many of the areas appear matt, rather like an undercoat with a slightly porous surface that has retained dirt and pollution, differing greatly from the original system.

The main roof girders (H-Beams) viewed from ground level appear to have possibly 25% or more touch up repairs. There are three starkly different colours, white, cream and a dirty buff. Without close access it is difficult to ascertain which is the original coating and which are the touch up coatings. It must be questioned why such large areas have been repaired if premature failures (corrosion/rusting) was only in the region on 1-2%.

Overall it is estimated approximately 1-2% of premature failure/corrosion is evident, however, to repair this area would increase to as much as 10% by preparing the surface back to sound areas of original coating and then applying the two-coat system. The areas poorly repaired previously have only made the overall appearance worse.”

156. Dr Ashworth (the Council’s paintwork expert) also undertook his own site inspection in November 2016. Reporting on his findings, he concluded:

“All locations of steelwork are displaying some degree of failure i.e. external structure, roof beams, internal items. Overall the painted steelwork is aesthetically unacceptable and, in the locations, set out in Sect. 5 is functionally unacceptable.

Different potential reasons for failure exist in different locations. With respect to the external structure we are of the opinion that paint failure and corrosion are there result of active or latent defects within the original painted steelwork which have progressed over time and have been ineffectively remediated. Inter-layer delamination of internal steelwork and roof beams with incipient corrosion are defects related to workmanship and/or materials.

The paint systems are stated to have a ‘life to first maintenance’ of 15 years; it is axiomatic that this criteria (sic) has not been achieved. The types of failure present are inconsistent with natural ageing and as such are in our opinion entirely unreasonable.

The environmental conditions were known at the outset and the paint systems proposed accordingly. All the failures have begun well before the 'life to first maintenance' and as such cannot be regarded as acceptable.

From the general assessment of the corroded elements we would be of the opinion that the structural integrity is not yet compromised. However, we would recommend that a detailed survey be carried out. In addition to the corrosion aspect there is the possibility that the paint defects could have adversely affected the efficacy of the intumescent performance. Again, it is recommended that a detailed assessment be carried out.

All the types of failure are progressive and need urgent attention. Extensive remedials need to be carried out in all locations- external structure, roof beams and internal items – in order to ensure compliance with the specification.”

157. In cross-examination, Dr Ashworth disagreed with the suggestion that the primer used on this project (Interzinc 52) was inferior to the original proposal to use Intercure 200. He explained that the two products worked in completely different ways. Interzinc 52 was a zinc-rich micaceous iron oxide coating which forms an effective barrier against moisture and gives some galvanic protection. The effectiveness of the product is not dependent on thickness and it can therefore be applied in a much thinner coating. Intercure 200 contained zinc phosphate, which inhibits corrosion but is inferior to a zinc-rich product such as Interzinc 52.

158. By a joint report written before Mr Clarke's instruction, Mr Fenwick and Dr Ashworth (the Council's paintwork expert) agreed that failure had occurred in three distinct locations:

“External structure

- 1.3 Failure is in the form of corrosion - related delamination patches over a large proportion of the steel members. Some failure is stress related (bolted joints) but the majority is unrelated to stress.
- 1.4 All the evidence is consistent with the failure having originated in the very early life of the stadium. Two most likely causes are mechanical erection damage and/or spots of inadequately prepared steel, i.e. installation defects.
- 1.5 Remedial overpainting work carried out has been poorly executed – inadequate surface preparation, pin-holed and ultra-thin overpaint layers prone to degradation. As such the remedials have been ineffective and corrosion has progressed. Furthermore, the remedials themselves have created other types of failure – flaking of top coats, dullness and selective algal growth.
- 1.6 The degree of corrosion would be in our opinion, not compromise the structural integrity at present, but urgent rectification is necessary as failure is progressive. Rapid deterioration was noted by AF since the original Surveys of November 2016.
- 1.7 In our opinion the percentage area of failure is irrelevant as the origin of the defects dates back to the time of installation. As the defects are widespread (not localised) then extensive remediation is required.

- 1.8 It is self-evident that the 'life to first maintenance' criterion has not been achieved – as failure began in the early life of the coating. The basic concept of this criterion is the resistance of the coating to gradual atmospheric ageing.

Roof beams

- 2.2. The primary mode of failure is premature underfilm corrosion which has disrupted the paint system. This has occurred primarily on the edges of the flanges but also on the flat sections of webs and flanges. Virtually every beam displays edge-of-flange corrosion; corrosion on the flat sections is more random and more extensive on the east side.
- 2.3 Whilst a small proportion of failure can be attributed to incorrectly repaired erection damage the majority of the corrosion failure is due to an intrinsic fault in the painting process. There is clear evidence of insufficient paint build on the edges of flanges and no provision for a stripe coat in the specifications.
- 2.4 It is also evident that extensive remedial works have been carried out and hence the paint system by definition has not complied with the 15-year quoted time to first maintenance. The information that we possess suggests that there have been two main attempts at remedial.
1. During and after erection with possibly the correct paint system but inadequate surface preparation and cleanliness.
 2. Repairs carried out by Port Painters which were performed with very little or no surface preparation and using a non-specified top coating, i.e. simply epoxy (which would be prone to discolouration) as opposed to the Interfine 979.
- 2.5 The remedials themselves have create secondary defects as well as being ineffective in stemming the corrosion: -
- Inappropriate paints which appear to have been adulterated/diluted, have been applied which have discoloured – resulting in unsightly patchiness.
- Workmanship remedials has been shoddy – poor preparation, unsystematic application, entrained air and dirt, all of which have result in inter-layer delamination and general ineffectiveness.

Internal steelwork

- 3.2 Failure is in the form of widespread delamination between multi-layers of paint; hence the applied paint does not conform to the specification.
- 3.3 It is not known if the multi-layers were original or related to remedials; either way the failure is due to faulty materials or workmanship.
- 3.4 By definition the failure cannot be related to any weathering effects but has been exacerbated by poor quality of the repairs.
- 3.5 With the exception of the structural beam sections the delamination and incipient corrosion. In an internal protected environment this can only be due to faulty materials or application.
- 3.7 Life to first maintenance criterion has again not been achieved. 'The degree and extent of failure must be deemed unacceptable.'

159. Mr Fenwick and Dr Ashworth reported that all three locations were displaying “unacceptable degrees of paint failure.” They added:
- “While several modes of failure are present (dependent on location) all primary faults relate to latent or actual defects from the time of installation. We can find no evidence that suggests other factors have contributed to any of the failures we have identified post installation such as mechanical damage and inappropriate cleaning/maintenance regime. Therefore it must follow that the paint systems have not complied with the ‘15-year to first maintenance’ criterion. Remedial works have been carried out over many years (i.e. initial transportation/erection repairs and those carried out by Port Painters) but cannot be considered to have had any positive contribution to the warranty; in fact these have been so poorly executed that they have resulted in secondary failures.”
160. Following Interserve’s instruction of Mr Clarke, all three paintwork experts agreed:
- 160.1 Damage to paintwork can be expected during the erection and assembly of the steelwork.
- 160.2 Some signs of rust and delamination would be expected over the 14 years since construction.
- 160.3 It is not possible to determine from inspection of failed paintwork when it delaminated or when rust appeared. This can only be determined through contemporaneous evidence.
- 160.4 Specifically, it is not possible to say whether the areas of rust and delamination now evident would have been either apparent or visible before 31 March 2006.
- 160.5 The state of the steel and paintwork would have been improved and its deterioration slowed by annual or even five-yearly inspections and repairs, provided that such inspections were carried out proficiently and were sufficiently extensive and in depth to address the causes of failure.
161. Mr Fenwick added that the experts were not in dispute that, over time, a coating weathers and ages. Here, however, there was premature failure because the preparation and application of the repairs was not “up to standard.” Mr Clarke reported that on-site repairs cannot be expected to give the same level of protection as shop-applied coatings. Mr Fenwick disagreed. In his view, provided the damaged areas were properly prepared and coated in accordance with the data sheets for the products and in accordance with the specification then the repairs should have an effective life to first maintenance in accordance with the performance expectations of the products used.
162. Mr Fenwick considered that the specification was fit for purpose. The paintwork issue is not therefore a design issue but rather a question of workmanship. Dr Ashworth agreed. He observed in cross-examination that the paint system was “doing its job” where it had been properly applied; indeed, it was in “excellent condition” for its age.
163. In cross-examination, Mr Fenwick said that he had been asked to look at whether paintwork defects identified on snagging lists had been rectified. It was not, however,

possible to say. Further, he could not say which areas of paintwork had been repaired or when.

FINDINGS OF FACT

164. I make the following findings of fact:

164.1 Original paintwork:

- a) There was a particular issue in respect of the H-beams used in the roof of the stadium in that the edges of these beams failed prematurely. Such sharp painted edges are especially vulnerable to failure as the cohesive force of the molecules in the coating causes the paint to pull away from the edges. Good practice therefore requires the additional application of a brush stripe coating to the edges. On the balance of probabilities, Interserve's contractors failed to apply the required additional brush coating to these edges.
- b) This finding is, however, irrelevant since SSMC's pleaded claim is expressly limited to "(a) paint delamination on external tubular sections; and (b) associated corrosion": Particulars of Claim, para. 91.
- c) With the exception of the edges of the H-beams, the paintwork applied under workshop conditions has fared well. Indeed, where the steelwork was properly prepared and the coatings were properly applied, the paintwork system generally performed well.
- d) Accordingly, there was not, in my judgment, a design issue.

164.2 On-site repairs:

- a) A consequence of painting the steelwork prior to its delivery to site was that it might suffer chips, scratches and gouges when being transported or handled, or during the erection work. Such damage might compromise just the top coat or it might leave bare steel exposed. Since unprotected steel exposed to the elements will inevitably rust, handling and erection damage might be associated with local rusting until made good.
- b) In the usual way, such localised damage is touched up as the works draw towards Practical Completion or by way of snagging during the Defects Liability Period.
- c) In this case, remedial work was carried out between August and October 2004. Further work followed between May and September 2005 and on a number of further occasions between 2006 and 2009.
- d) The principal areas of failure to the external tubular sections have been those where there was handling or erection damage. On the balance of probabilities, these areas were inadequately prepared for the on-site repairs.
- e) There is, however, no evidence to allow the court to identify in respect of any individual area of damage whether it was inadequately prepared for repairs (1) on or before 22 April 2005; (2) after 22 April 2005 but before 1 April 2006; or (3) on or after 1 April 2006.

THE PAINTWORK CLAIM AGAINST INTERSERVE

165. As before, I consider the merits of the claim under clauses 16.2-16.3 lest I am wrong in my finding that such claims did not survive the issue of the Notice of Completion of Making Good Defects [as to which, see paragraphs 19-36 above].

Alleged breaches of the building contract

166. SSMC pleads at paragraph 93 of its Particulars of Claim that Interserve was in breach of the building contract in that:

166.1 it failed to apply three coats of paint;

166.2 it caused damage to steelwork and paint during erection;

166.3 the paint did not have a life to first maintenance for corrosion purposes of at least 15 years;

166.4 it failed adequately to prepare the steel or apply the paint; and

166.5 its attempts to remedy these issues were “inept.”

167. As to these allegations:

167.1 Failure to apply three coats to the external steelwork: Although the original specification was for a three-coat solution, this was reduced to two coats as part of the agreed value engineering. In any event, there is no suggestion that the entirety of the external steelwork should be repainted, but only those areas where the paintwork has failed.

167.2 Handling and erection damage: As I have observed above, a consequence of painting the steelwork prior to its delivery to site was that it might suffer chips, scratches and gouges when being handled or during the erection work, which would then need to be made good. Notwithstanding that entirely normal position, SSMC pleads at paragraph 93(2) of the Particulars of Claim that Interserve was in breach of the building contract in that it caused damage to the steelwork and paint during erection. In my judgment, the fact of handling and erection damage having occurred did not of itself put Interserve in breach of the building contract, although it would have been in breach in so far as it failed to make good the damage.

167.3 Life to first maintenance:

- a) I accept Mr Fenwick and Dr Ashworth’s expert evidence that the expression “life to first maintenance” is generally understood in the industry to mean the period to first major maintenance. Mr Fenwick told me that he would therefore expect the steelwork to need to be completely repainted 15 years after Practical Completion, i.e. in the spring of 2020. All three paintwork experts agreed that the life of paintwork is enhanced by annual, or even five-yearly, inspections and repairs.
- b) BS 5493 (Protective coating of iron and steel structures against corrosion) defines life to first maintenance for the purpose of such standard as “the time which can elapse before major or general maintenance of the coating becomes necessary.
- c) While the construction of the contract is plainly a matter for me rather than the experts, I am entitled to take into account the commonly understood meaning within the construction industry. Taking into account both the usual

meaning of the expression in the industry (as evidenced by the experts and BS 5493) and the agreed evidence that annual or five-yearly maintenance, comprising inspection and minor repair work, would enhance the life of the paintwork, I am satisfied that, upon the true construction of the contract, Interserve undertook to provide a coating system that would not require replacement before March 2020.

- d) Inevitably the degradation of paintwork is a gradual process. It follows that a paintwork system that requires complete replacement in year 15, will not be looking its best some 11-15 years after Practical Completion. Accordingly, the simple fact that the photographs taken by Mr Fenwick and Dr Ashworth in November 2016 showed some areas of delamination and rust is not of itself proof that Interserve was in breach of its obligation to provide a system with a “time to first maintenance” of 15 years.
- e) I accept Mr Fenwick’s evidence that only 1-2% of the steelwork showed signs of corrosion and rust in November 2016, 11½ years after Practical Completion. Further, I accept Mr Fenwick’s logical conclusion that where the steelwork was properly prepared and the coatings were properly applied, the paintwork system performed well. This indicates, and I find, that generally the paint system was capable of providing the specified life to first maintenance for corrosion purposes.
- f) Against that, the on-site repairs failed prematurely and have not provided the specified life to first maintenance.

167.4 Adequacy of preparation & application: There is no evidence that the steel was not adequately prepared in the workshop. Save for the unpleaded point about the absence of a second brush stripe on sharp edges, there is no evidence that the original coatings were inadequately applied.

167.5 Remedial works: There is, however, evidence of inadequate preparation and painting of the remedial works on site. This, I find, was a breach of Interserve’s obligations under clause 8 of the building contract to carry out the painting works in a proper and workmanlike manner.

Claim under clause 16

- 168. Any defect in the remedial work was therefore due to Interserve’s failure to comply with its obligation under the building contract to undertake onsite repairs in a proper and workmanlike manner. By clause 16, Interserve was obliged to identify and make good any such defects which appeared by 31 March 2006.
- 169. There was therefore a good claim under clause 16.2 for failure to identify and make good such defects, albeit such claim cannot now be pursued following the Notice of Completion of Making Good Defects. It would, in any event, fail for want of proof of the defects not made good. (As to this, see the like conclusion in respect of the claim against the Council at paragraphs 181-182 below.)

THE PAINTWORK CLAIM AGAINST THE COUNCIL

Latent Defects under clause 7.1

An existing defect at 22 April 2005?

170. The first issue is whether the paintwork was a defect as at 22 April 2005. The suggestion in paragraph 91 of the Particulars of Claim that the stadium increasingly suffered from delamination and associated corrosion from 2008 does not appear to be a promising start. Nevertheless, I accept that the pleader was focusing here on when the paintwork defects manifested themselves and not with the question of whether defects existed at the time of the lease.
171. SSMC's written closing submissions on the Latent Defect were revealing:
- 171.1 Rather than clearly set out why the court should find that there were existing defects as at 22 April 2005, the submissions focused instead on the lack of defence evidence.
- 171.2 Many pages were then devoted to a defence of Mr Davies. I have already dealt with that point above. While I accept that he was doing his best in circumstances where he had no first-hand knowledge, ultimately this conclusion does not assist SSMC. At some point, it has to discharge the burden of proving its case.
- 171.3 Messrs Mort and Owen realistically accepted that the evidence as to the position on 22 April 2005 was "not entirely satisfactory."
172. I accept Mr Hussain's submission that the mere fact that SSMC might be able to establish a breach of Interserve's obligation to provide paintwork with a life to first maintenance of 15 years is not in point; sound paintwork that has a shorter than specified lifespan is not a defect in the property although it might well be a breach of the building contract. Indeed, clause 6.6 of the lease expressly excluded any extraneous representations or warranties. Equally, the application of two rather than three coats was not a defect; indeed, for the reasons explained above, it was not even a breach of contract. Accordingly, I consider the paintwork allegations not against the contractual standards but by reference to the wider question of whether the paintwork was a defect in the stadium as at 22 April 2005.
173. There is evidence of two types of defect in the paintwork at 22 April 2005:
- 173.1 Unrepaired handling and erection damage: On the balance of probabilities, the touching up work had not been completed by 22 April 2005 and certain areas of damage remained unrepaired. There is no clear evidence as to the number or precise locations of these areas of unrepaired paintwork.
- 173.2 Inadequate on-site repairs:
- a) More significantly, there were areas of poorly repaired handling and erection damage. The problem was in part cosmetic in that there was a difference in appearance between the shop-painted steelwork and the repaired sections. This was likely to have been caused both by differences in the manner of application of the paint and by the presence of airborne dust. It is debatable whether this amounted to a defect under the lease, especially since some discolouration was removed by wiping down the steelwork with a damp cloth. Such debate is, however, academic since by definition the difference in colour

was plainly visible and therefore any defect would not qualify as a Latent Defect.

- b) There was, however, a more serious problem in that, as I have found above, some on-site repairs were not properly prepared thereby compromising their integrity. Here, it is necessary to distinguish not just between breaches of contract and defects in the property, but also between defects and their consequences. Accordingly, inadequately prepared or applied paintwork would, in my judgment, be a defect even though the consequences of such defect (early delamination and rusting) had not yet manifested themselves.

Not visible?

174. By its Defence, the Council contended that any defects were visible at the commencement of the lease. By its Reply, SSMC responded at paragraph 34:

“It is admitted that some defects in the paintwork were visible on 30 March 2005, but the defects the subject of this litigation were not.”

175. The Council attempted unsuccessfully to strike out, alternatively obtain summary judgment, on the Latent Defect issue. It argued that the contemporaneous correspondence clearly showed that the defects were visible on reasonable inspection at the commencement of the lease and that SSMC’s case must fail because:

175.1 the defects were visible (and not therefore latent), even if the incidence of such defects subsequently increased; alternatively

175.2 if the increased incidence of corrosion is properly to be regarded as a separate defect, then it was by definition not existing at the commencement of the lease and could not therefore be a latent defect.

176. Against that, SSMC contended that the defects were, and had been consistently treated by the parties as having been, Latent Defects. In dismissing the application, O’Farrell J unsurprisingly held that these were issues for trial. Her judgment is at [2018] EWHC 2210 (TCC). She did, however, order SSMC to provide proper particulars of its case as to the defects that were visible at 30 March 2005.

177. The only further particulars given were as follows:

“1. Whatever manifestations of defects there may have been prior to the Term Commencement Date of the lease (22 April 2005) those were resolved, (or ostensibly so) and in any event were not visible as at that date.

5. There is no contemporaneous document identifying precisely what defects were visible as of 30 March 2005. The best particulars that the Claimant can provide as to the nature, location and extent, are as follows ...”

The pleader then set out a selection of the contemporaneous correspondence, much of which has been summarised above.

178. On any view, these were not proper particulars of the clear admission that some defects were visible in March/April 2005. In any event, as already noted, Mr Davies accepted in his oral evidence that the contemporaneous evidence did not support the plea that the “manifestations of defects” had been “resolved or ostensibly so” by 22 April 2005.
179. On the balance of probabilities, there were some defects that were visible at 22 April 2005 and further defects that were not then visible:
- 179.1 The unrepaired construction damage consisted of chips, scratches and gouges. In places where the damage left bare steel exposed, rust was evident. Plainly, unrepaired construction damage was visible and accordingly it was not a Latent Defect.
- 179.2 There were areas where defective remedial works had already failed. Where there was rust or other visible evidence of failure, such defects were visible and did not comprise Latent Defects.
- 179.3 There were, however, other areas where defective remedial work had been carried out but there was no visible sign of the defect by 22 April 2005. These were Latent Defects. I do not accept Mr Hussain’s arguments that such defects were not Latent Defects because:
- a) there were other areas of like defects that were then visible; or
 - b) subsequent delamination and rusting caused by such defective remedial work amounted to new and later defects.

Caused by defective design, workmanship or materials?

180. For the reasons already explained, the failure properly to prepare and paint the steelwork when touching up earlier handling and erection damage was a breach of Interserve’s obligation to paint the steelwork in a proper and workmanlike manner.

Conclusions

181. For these reasons, I conclude:
- 181.1 Unrepaired construction damage at 22 April 2005:
- a) Any areas of unrepaired construction damage, comprising chips, scratches and gouges, that had not been repaired by 22 April 2005 were self-evidently visible at that date. Accordingly, they were not Latent Defects.
 - b) Further, in so far as such damage was subsequently repaired defectively, the defective repair was, by definition, not existing at 22 April 2005 and so again such later repair work cannot have been a Latent Defect.
- 181.2 Visible repair issues at 22 April 2005: Some of the construction damage had been repaired but nevertheless there were areas of rust, striations and differences in colour between the original and the repaired paintwork. Where such defects existed at 22 April 2005 they were again self-evidently visible. They were not therefore Latent Defects.
- 181.3 Other repairs carried out by 22 April 2005: On the balance of probabilities there were further areas of steelwork where defective repair work had been undertaken. Such defects were not visible at 22 April 2005 because they had not yet manifested

themselves by delamination or rust. These were, in my judgment, Latent Defects since they were:

- a) defects in the state of the stadium existing at 22 April 2005;
- b) not visible at such date; and
- c) they were caused by defective workmanship.

181.4 Subsequent defective repairs of Latent Defects:

- a) Given the number of times that Interserve returned to site, there must be a number of areas where the contractor carried out repeat repairs. What then of the possibility of subsequent defective repairs of Latent Defects? In other words, what is the position where a defective repair carried out on or before 22 April 2005 which was not then visible was subsequently defectively repaired for a second or third time?
- b) Interserve would remain in breach of its core obligation to carry out the paintwork in a proper and workmanlike manner. Further, it would be in breach of its obligation under clause 16 to make good the defect.
- c) In one sense, the original 2005 defect had not been repaired and one might think that the subsequent second or third defective repair should likewise qualify as a Latent Defect. In my judgment, this would not necessarily be the case:
 - i. Assume that the defect was a lack of proper preparation of the steelwork. If the remedial work failed to remove the coatings and a further top coat was simply applied on top of the earlier inadequate repair then the original Latent Defect would have remained.
 - ii. If, however, the steelwork was taken back to bare metal, it might well be that the earlier defective repair had been removed. Any defect in the subsequent repair work (perhaps caused by allowing the bare metal to become exposed to moisture before reapplying the coatings or inadequately applying the top coats) would create a new defect which could not, by definition, be a Latent Defect.

182. Accordingly, the twin criteria that the defect had to be existing but not visible at 22 April 2005 present a real difficulty for SSMC:

182.1 First, the only evidence of defective remedial work prior to 22 April 2005 comes from the various inspections of the paintwork during the contract works. Save for measurements of DFT, such evidence is not of tests designed to expose Latent Defects but of visual inspections. By definition, any defects observed upon such inspections were visible and accordingly they were not Latent Defects.

182.2 Secondly, the repeated repairs carried out on many occasions since 22 April 2005 means that while there is evidence of the premature failure of defectively repaired construction damage, there is no evidence that now allows the court to distinguish between the extent of:

- a) the Latent Defects, being the areas that had been defectively repaired by 22 April 2005 but where the original 2005 defect was not then visible and subsisted at the date of issue of these proceedings; and

- b) other areas of damaged paintwork which were not Latent Defects, comprising variously:
 - (i) areas of construction damage that had not been repaired at 22 April 2005 but which were subsequently defectively repaired;
 - (ii) areas of construction damage that had already been repaired by 22 April 2005 but where defects such as rust, striations or differences in colour were already visible; and
 - (iii) areas of construction damage where the 2005 defect no longer subsists.

A snagging list item under clause 7.2

183. Various paintwork defects were identified on snagging lists. There is not, however, any evidence that allows SSMC to correlate specific paintwork defects with items on the snagging lists. Indeed, both Mr Davies and Mr Fenwick expressly accepted that point in cross-examination.

Breach of clause 7

184. The claim against the Council in respect of the paintwork therefore fails for want of proof of either unrepaired Latent Defects or snagging list items. Such precision would not matter if this were a straightforward claim under clause 8 of the building contract. The lack of such evidence is, however, fatal to this claim under the 2006 agreement. Nevertheless, and lest I am wrong in these conclusions, I now turn to consider issues of breach.
185. SSMC pleads at paragraph 99 of its Particulars of Claim that the Council “has taken no or no material steps in relation to the defects.” It is plainly wrong to say that the Council took no steps to require Interserve to carry out remedial works. The thrust of SSMC’s case is that the Council should have enforced the building contract through either litigation or adjudication. In order to consider the issue of breach it is necessary to analyse the position at different points in time.

22 April 2005 to 26 May 2011

186. The Council required Interserve to carry out remedial works on a number of occasions between May 2005 and 2010. On 23 November 2010, Gardiner & Theobald signed off the paint repairs as complete. Subsequently, on 26 May 2011, the agent issued the Notice of Completion of Making Good Defects. There is no evidence that the Council acted improperly in acting upon its agent’s professional view in both November 2010 and April 2011 that the paintwork defects had then been made good. Indeed, SSMC did not challenge this suggestion at the time. Further, for the reasons already explained, the notice did not affect the Council’s ability to enforce the core obligation under the building contract in respect of the paintwork.

26 May 2011 to 4 April 2017

187. On 24 November 2014, the Council wrote to SSMC:

“I have exchanged correspondence with [Interserve] who have advised that in their opinion the requirements for further attention to the paint finish is not as a result of any defect and that the work falls well within what would have been allowed for, under the contract, as normal maintenance for a building of this age. I have verified this as far as is possible both by a review of the documents available and also in discussion with our consultants at the time, Gardiner & Theobald.

I have also checked the relevant lease terms and life cycle maintenance schedule which confirms that SSMC have an obligation to inspect annually and repair and touch up paintwork every 5 years. This would also seem to confirm that there is a maintenance requirement for SSMC in that the paint finish were (sic) not intended to be entirely maintenance free.

As such I do not believe that we can hold [Interserve] responsible for further works unless:

- (a) Repairs to previous failures have failed again within a reasonable period. If there are instances of this then please let me know.
- (b) If the failure rate exceeds 1% of the total painted surface they (sic) may be a case to escalate the matter.

I am happy to discuss further once you have had a chance to consider these comments and present them to the Board and can meet to look at the issue if this would help.”

188. This was an entirely appropriate response. Far from abdicating responsibility, it indicated that the Council was happy to work with SSMC if there was a case for challenging Interserve’s position. Mr Davies responded on behalf of SSMC on 3 December 2014. He said that he did not know the percentage of failure. He said that SSMC would seek advice from an independent specialist consultant “forthwith” to review the condition of the paintwork and advise as to whether it met the standard to be expected at that point in its lifespan. Thereafter, SSMC stated that it would “take whatever action [was] necessary to ensure that the matter is remedied and ... seek to recover all associated costs directly from [Interserve].”
189. In cross examination, it emerged that SSMC did not in fact intend to instruct an expert immediately, carry out any remedial work or reclaim the costs directly from Interserve. SSMC cannot, however, complain that the Council took Mr Davies at his word and assumed both that he had the matter in hand and that he would revert to the Council if there were further problems or he had evidence to support a claim.
190. Nothing further was heard from SSMC about the paintwork until 20 January 2016. Mr Davies explained that the issue had been temporarily deferred pending a decision by the football club as to the possible expansion of the Liberty Stadium. Expansion would have involved rebuilding the stands making any further paintwork repairs or legal action redundant.
191. The football club had first approached the Council in respect of the possible expansion of the stadium in January 2012. Two applications for planning permission had been made in

2013. The first was for a four-storey extension to the west stand to provide additional seating as well as improved press and media accommodation. The second application proposed the rebuilding of the north, south and east stands. The expansion project would have increased capacity from 20,500 to 32,992 and increased the height of the structural steel by some 18 metres. Planning approval was granted, but the plans required the club to acquire additional land to the south of the stadium. On 16 November 2017, the Council's cabinet approved the necessary land exchange to facilitate the expansion.
192. Notwithstanding this acquisition, Mr Davies confirmed in his oral evidence that SSMC does not currently intend to progress the expansion programme. Indeed, it was evident that expansion was tied somewhat to Swansea's footballing fortunes and was less economically viable since the club's relegation from the Premier League at the end of the 2017/8 season. I accept Mr Davies' evidence and accordingly the possibility of expansion is not, as Mr Hussain argued, the simple answer to this claim.
 193. In any event, by his e-mail of 20 January 2016, Mr Davies explained that there was "a need for SSMC to consider its position with respect to how the areas of defective paintwork may be addressed" and asked the Council to confirm its position on the matter. Mr Davies' e-mail was silent as to the questions posed by the Council in 2014 or as to the expert investigation of the issue which had allegedly been imminent in December 2014.
 194. On 26 January 2016, Mr Nicholls responded that he would take the matter up with Interserve. He did so promptly and, on 29 March 2016, wrote to SSMC explaining that Interserve did not accept further liability for returning to site. On 25 May 2016, Mr Nicholls notified SSMC that the Council intended to challenge Interserve's position and instruct an independent expert to advise on the paintwork issues.
 195. The Council invited SSMC to agree a joint instruction and to offer a view on whether to extend the proposed joint instruction to Interserve. SSMC responded that it would instruct its own expert. On 16 August 2016, the Council formally required Interserve to make good the paintwork defects. It invited Interserve to agree to the joint instruction of John Ashworth as a paintwork expert but, again, its proposal was declined.
 196. On 21 September 2016, Mr Davies forwarded the legal advice received from SSMC's solicitor. The tenor of the communication was that SSMC's preference was for a non-litigious outcome but that SSMC was aware of the looming limitation issue and that it would issue a protective writ so that the parties could then continue to find a negotiated resolution to the paintwork issue.
 197. There was no suggestion or request that the Council should sue Interserve. On the contrary, SSMC's position was that the Council was using its best endeavours to press Interserve. Mr Davies accepted as much both in his letter of 30 September 2016 and in cross examination. SSMC's position was not to request that the Council should litigate but a clear statement of intent that SSMC would, if necessary, sue Interserve under the collateral warranty while also pursuing the Council for alleged breach of its obligations under the 2006 agreement.

198. On 1 November 2016, the Council formally instructed Mr Ashworth. He reported and took part in a joint meeting with experts instructed by SSMC.
199. Letters of claim were sent to both the Council and Interserve on 16 December 2016. SSMC made plain that it was seeking to work with the Council and that it wished to find a non-litigious route but that it intended to issue protective proceedings if necessary. Meanwhile, SSMC asserted that it and the Council should continue their expert investigations with a view to a meeting of experts in due course. On 16 March 2017, SSMC provided the Council with a copy of Mr Fenwick's report. In doing so, it finally answered the question asked as long ago as November 2014 as to whether the extent of the defects exceeded 1%. The report put the defective paintwork at 1-2%.
200. In my judgment, SSMC has failed to prove that the Council failed to take all reasonable steps to enforce its rights under the building contract in respect of the paintwork defects:
- 200.1 Far from asking the Council to litigate or refer any dispute to adjudication, SSMC expressly asked it to press the issue in correspondence with Interserve.
- 200.2 The Council complied and indeed SSMC repeatedly recognised that the Council had used its best endeavours to require Interserve to address the paintwork issues.
- 200.3 SSMC expressed its clear preference for finding a non-litigious outcome.
- 200.4 As the limitation date loomed, SSMC reassured the Council that it was aware of the limitation issue and that it would issue protective proceedings.
- 200.5 SSMC made plain its intention to issue proceedings directly against Interserve should litigation become necessary.
- 200.6 In these circumstances, it was not reasonable to have expected the Council to have ignored SSMC's preferences and to have issued proceedings or referred the paintwork dispute to adjudication.

Conclusions

201. Accordingly, I dismiss the claim against the Council in respect of the paintwork on the grounds that SSMC has failed to prove that:
- 201.1 the defects now complained of were Latent Defects at 22 April 2005, alternatively unrepaired defects listed on a snagging list; and
- 201.2 in any event, that the Council failed to take all reasonable steps to enforce its rights against Interserve.

DECISION

202. For these reasons, SSMC's claims are dismissed against both the Council and Interserve. There is accordingly no need to consider either quantum or the Council's own claim against Interserve for a contribution or indemnity.