

Judgment : Giles JA; Tobias JA; McColl JA. Supreme Court of New South Wales. Court of Appeal. 15th December 2006.

- 1 **GILES JA:** I agree with Tobias JA.
- 2 **TOBIAS JA:** The town of Brewarrina in northwestern New South Wales has in the past been subject from time to time to inundation by floodwaters from the Barwon River. To prevent these occurrences earthen levee banks were constructed around the town. After a flood in 2000 when the town's population was heavily engaged in saving the existing levees, the appellant (the Council) commissioned a redesign of the levees with a view to upgrading them to improve their effectiveness. The upgrade works were the subject of a tender process. The first respondent (Beckhaus Civil), whose principal is the second respondent (Mr Beckhaus), was the successful tenderer.
- 3 A contract in the form of General Conditions of Contract AS2124-1992 (the contract) with annexed related documents including Technical Specifications (the Specifications) was entered into between the Council and Beckhaus Civil on 13 October 2001. Work commenced the following day and continued until March 2002 when it became apparent to the Council that having nearly completed the works, Beckhaus Civil was about to apply for a Certificate of Practical Completion.
- 4 The contract provided for the Council to appoint one of its employees to the position of Superintendent of Works. On 16 December 2001 a Mr Komp was so appointed. However, on 21 March 2002 Mr Komp was removed as superintendent and a Mr Corven was appointed in his place. Mr Corven, after carrying out various investigations, sent a series of letters to Beckhaus Civil alleging non-compliance with a number of the requirements of the Specifications. On 26 April 2002 Beckhaus Civil lodged Progress Claim No.7 in the amount of \$702,678.45 in respect of which it claimed payment pursuant to s.8 of the *Building and Construction Industry Security of Payment Act 1999* (the 1999 Act). It appears that Beckhaus Civil served a payment claim on the Council pursuant to s.13 of that Act but apparently the Council did not serve a payment schedule in reply.
- 5 Accordingly, the Council became liable to pay the claimed amount to Beckhaus Civil pursuant to s.14(4) of the 1999 Act. It did not do so. Consequently Beckhaus Civil commenced proceedings in the Supreme Court pursuant to s.15(2) of the 1999 Act. Those proceedings went through a number of interlocutory stages including an application for summary judgment with respect to Beckhaus Civil's claim. That application was granted by Associate Justice Macready (the primary judge) but set aside on appeal to this Court: *Brewarrina Shire Council v Beckhaus Civil Pty Ltd* (2003) 56 NSWLR 576.
- 6 The Council filed both a defence and a cross-claim for breach of contract. The major issue on the cross-claim was an allegation that the fill utilised in the construction of the levee banks was not compacted in accordance with the specification requiring a compaction to 95% minimum dry density. One further issue was whether the contractual requirement of cl.8.10 of the Specifications had been achieved, being that the linear shrinkage value of the soil used to establish the levee banks be less than 12%. A second was whether the soil around the culverts, which was part of the levee banks, had been sufficiently compacted.
- 7 The proceedings were heard by the primary judge in March, May and June 2004 and decided by his Honour on 16 September 2004 generally in favour of Beckhaus Civil (*Beckhaus Civil Pty Ltd v Brewarrina Shire Council* [2004] NSWSC 840). In essence, it was ordered that the Council pay Beckhaus Civil the sum of \$905,009.53 including interest.
- 8 The primary judge made final orders on 9 December 2004 after a further hearing relating to some outstanding issues in respect of which he delivered judgment on 7 December 2004 (*Beckhaus Civil Pty Ltd v Brewarrina Shire Council (No 2)* [2004] NSWSC 1160). However, the sum of \$702,678.45 (which was the amount of Progress Claim No.7) had already been paid by the Council to Beckhaus Civil on 18 November 2002 pursuant to the terms of an order made by this Court staying the default judgment and orders made by the primary judge on 18 October 2002 which were ultimately set aside by the Court on 17 February 2003 in the proceedings referred to in [5] above.
- 9 However, a condition of the grant of the stay was that Beckhaus Civil provide a bank guarantee securing repayment of the amount with interest in respect of which default judgment had been granted. That guarantee was provided and as a consequence, pursuant to the terms of the stay, the Council paid the amount of the default judgment (\$702,678.45) to Beckhaus Civil. A condition of the bank guarantee required that this amount be placed on interest bearing deposit with the bank.
- 10 The Council appealed against the orders made by the primary judge on 9 December 2004. On 4 August 2005 that appeal was allowed and the orders made by the primary judge following his judgments of 16 September 2004 and 7 December 2004 were set aside. An order was also made remitting some nine issues to his Honour for determination in the light of this Court's reasons for judgment: *Brewarrina Shire Council v Beckhaus Civil Pty Ltd* [2005] NSWCA 248.
- 11 The primary judge determined the remitted matters on 17 November 2005 (the first judgment) (*Beckhaus Civil Pty Ltd v Brewarrina Shire Council*, 55025/02, Macready AJ). However, a number of ancillary issues were left undetermined but which his Honour decided in a judgment delivered on 16 December 2005 (the second judgment). There were still some outstanding matters which were determined by his Honour in a judgment delivered on 21 December 2005 (the third judgment) on which date his Honour made the following orders:

- “(1) On the Plaintiff’s claim against the Defendant, verdict and judgment in favour of the Plaintiff in the sum of \$686,914 inclusive of GST, such sum to be in satisfaction of each of the claims made in paragraphs 1, 2 and 3 of the Amended Summons.
- (2) On the Cross claim brought by the Defendant against the Plaintiff, verdict and judgment in favour of the Defendant in the sum of \$481,206 inclusive of GST
- (3) That the Cross Claim brought by the Defendant against the second Cross Defendant be dismissed.
- (4) That the Defendant pay the Plaintiff’s interest in the sum of \$74,261.
- (5) In consolidation of orders 1, 2 and 4, verdict and judgment in favour of the Plaintiff in the sum of \$279,969.
- (6) That the Second Cross Claim be dismissed with no order as to costs.
- (7) In respect of the Bank Guarantee in the sum of \$702,678.45 provided by the Plaintiff to the Defendant pursuant to orders made by the Court of Appeal on 11 November 2002 that the Bank Guarantee be cancelled and returned.
- (8) In respect of the sum of \$702,678.45 provided by the Defendant to the Plaintiff pursuant to orders made by the Court of Appeal on 11 November 2002 and subject to cancellation and return of the Bank Guarantee in accordance with order 7 above, that the Plaintiff pay to the Defendant the sum of \$422,709.45.
- (9) Costs to be reserved.”

12 It is against some of those orders that the Council now brings its third appeal to this Court.

The relevant remitted issues

- 13 This Court remitted nine issues to the primary judge to be determined in the light of its reasons given on 4 August 2005. Of those, only issues (i), (ii) and (viii) are relevant to this appeal. They are:
- (i) The costs of rectifying the work at the culverts;
 - (ii) The extent to which the levees constructed by Beckhaus Civil did not comply with the requirement of 12% maximum linear shrinkage and the costs of rectifying the work that was defective in this respect.
 - (viii) Interest, if any.
- 14 As to issue (i) above, there were apparently either 12 or 13 culverts in the levees which Beckhaus Civil constructed. The expert witnesses identified the culverts as part of the levees that were particularly susceptible to erosion. This Court in its 4 August 2005 judgment found (at [128]) that the primary judge had erred in finding that the evidence demonstrated that there had been substantial compliance with the contractual requirements for compaction over the culverts. Further, it concluded (at [129]) that the Council was entitled to damages flowing from the breach of contract arising from the failure by Beckhaus Civil to carry out the tests required in relation to compaction of the material around the culverts. Those damages were to be the costs of rectifying the work on the culverts which would involve removing a sufficient amount of the fill over and in the vicinity of the culverts to enable the work to be performed in accordance with the Specification. The assessment of those damages was remitted to the primary judge.
- 15 Issue (ii) related to the clause in the Specifications that required the material from which the levee embankment was constructed to have a maximum linear shrinkage value of 12%. In this respect, the contract required testing for linear shrinkage. These tests were performed on behalf of Beckhaus Civil by Civil Engineering Testing Services (CETS) during the course of construction of the works and, after Beckhaus Civil left the site in April 2002, by each of Barnson Testing and Douglas Partners and in September 2003 by Golder Associates Testing. Relevantly, after Beckhaus Civil left the site, 53 linear shrinkage tests were performed and just over half of them failed, less than the 12% requirement.
- 16 Accordingly, Ipp JA who delivered the leading judgment, (at [159]) concluded that he would remit to the primary judge *“the issues involving the extent to which the levee system was constructed with material having a maximum linear shrinkage value of more than 12% and an assessment of the damages suffered by the Council in consequence of the levee system not being constructed with material that consistently complied with the 12% linear shrinkage requirement.”*
- Accordingly, the remittal included the assessment of damages for rectification costs relating to the extent to which the levees did not comply with the requirement of 12% maximum linear shrinkage.
- 17 Given the extent of rectification having been determined by the primary judge, an issue relevant to this remittal was whether the cost of that rectification should be confined to the replacement of what was referred to in the expert evidence as the wet sides of the levee batter (being the side facing the river). An alternative issue was whether the relevant parts of both the wet and dry side (the latter being the side facing the town) of the batter which failed the linear shrinkage test were required to be replaced. The Council contended for the latter upon the basis that it was entitled to the cost of bringing the levees into conformity with the Specifications. This entitlement could only be achieved if both the wet and dry sides of the batter (which were required to be replaced) conformed to the Specification of 12% maximum linear shrinkage.
- 18 Issue (iii) related to the question of interest, a matter upon which this Court did not comment in its judgment of 4 August 2005. The issue arose out of an award by the primary judge in favour of Beckhaus Civil of interest on the sum of \$702,678 from 18 November 2002 to 15 March 2004 and thereafter on the sum of \$205,707 to 9

December 2005 (being the date of final orders), the difference between those two sums being, in effect, the amount to which his Honour found that the Council was entitled as representing the costs of rectification of the defective work.

The issue with respect to the costs of rectifying the work at the culverts

19 In his judgment in this Court of 4 August 2005, Ipp JA noted (in [110]) that unlike the rest of the levees, the soil in the immediate vicinity of the culverts and up to a certain level over the culverts could not be compacted by using heavy machinery as the weight of that machinery might damage the culverts. In [3] of the first judgment on the remitter of the assessment of the costs of rectifying the work at the culverts, the primary judge referred to the evidence of a Dr Truscott (an expert called by the Council) with respect to the rectification of the culverts in which he had proposed three options. The first was the installation of a sand chimney filter; the second was the removal, treatment and replacement of material to the wet side of the levees; and his third was the total reconstruction of the levees by removal, treatment, replacement and compaction of the material.

20 As will appear, the options advanced by Dr Truscott, as the primary judge's summary of them indicated, related more to the rectification of the levees due to the replacement of those parts of them that failed the linear shrinkage test rather than to the rectification work required around the culverts. Nevertheless, his Honour accepted the preferred option of Dr Burman on behalf of Beckhaus Civil that the material be replaced according to the original design. In any event, his Honour determined that the most appropriate option so far as the culverts were concerned, was total replacement of the material conforming to the requirements of the Specifications.

21 On that basis on the remittal hearing Mr Wilde on behalf of Beckhaus Civil and Mr Driml on behalf of the Council calculated the relevant costs. The former determined that the costs of the total replacement option amounted to \$147,110 excluding GST. Mr Driml's estimate on behalf of the Council was \$552,297. Both were cross-examined and, for the reasons referred to by his Honour in [7] of the first judgment, he considered that Mr Driml's calculations contained a large number of irregularities and false assumptions. At [8] he concluded that he had no confidence in Mr Driml's costings and he therefore adopted those of Mr Wilde.

22 The Council's grounds of appeal with respect to this issue were as follows:

"(a) His Honour erred at paragraphs [6] and [8] of his Judgment of 17 November 2005 in accepting the evidence of [Beckhaus Civil's] expert, Mr Wilde, on the cost of rectification around the culverts in circumstances where:
(i) Mr Wilde conceded that his methodology did not allow for any hand compaction around the culverts;
(ii) the incontrovertible and uncontested evidence was that hand compaction was required around the culverts.
(b) His Honour ought to have held that hand compaction around the culverts was critical to the safety and integrity of the levees consistent with the evidence at the hearing."

23 The basis of the Council's complaint with respect to this issue was that Mr Wilde did not allow for any "hand compaction" around the culverts. It was submitted that he was in error in failing to do so as there was incontrovertible evidence that hand compaction was so required. Reference was made to the following evidence given by Mr Beckhaus in cross-examination during the hearing in 2004:

"Q. It is normally required for it to be undertaken by hand?"

A. Close to the structure it is.

Q. You understood that in the case of this project it was necessary for compaction work to be undertaken by hand around the culverts?"

A. I did.

...

Q. You are aware that it was necessary under the Contract for a PAD foot roller to be used in order to carry out compaction work?"

A. Yes.

Q. Other than around the culverts which had to be done by hand?"

A. Yes."

24 Reliance was also placed upon the following evidence of Mr Macartney, Beckhaus Civil's supervisor:

"Q. Would you explain the process of compaction around the culverts as you observed it?"

A. We would use a hand-held, sometimes, Wacka-Packa driven and held by a man ..."

25 The Council also relied upon the cross-examination of Dr Truscott at the 2004 hearing on the premise, so it was submitted, that hand compaction was required around the culverts. However, a reading of that evidence (Black 2/352T-353M) reveals that the cross-examination had proceeded upon the assumption that the material around the culverts was to be compacted with a Wacka-Packa. Furthermore, when Mr Wilde was cross-examined at the hearing before the primary judge on 4 November 2005, the following exchange took place (Supp Black 41J-M):

"Q. You would agree that compaction adjacent to the culverts is most labour intensive requiring hand compaction and often necessitating the use of a Wacka-Packa until you reach the top of the pipe.

A. It is labour intensive, but we would use a Wacka-Packa fitted to an excavator, and within the width so that you have not got men in the bottom of the trench, you have a machine, and it is far more safer and it is much quicker.

...

Q. You will agree that fill had to be put in at 150mm layers?

A. Yes, and spread it thinly and then run over it with a wheel.

Q. You actually have not allowed compaction up to the top of the pipe, have you?

A. Why is that?

Q. I ask you.

A. I have. There is an amount of soil that we are allowed to take out, it has to be treated with lime, it has to be at a particular moisture level content, and it is put in thinly and it is rolled with a compaction wheel and in some cases, with a Wacka-Packa."

- 26 The Council also referred the Court to the further cross-examination of Mr Wilde (Supp Black 48V and 49F). However, there is nothing in that evidence that suggested that use of a Wacka-Packa in the manner referred to by Mr Wilde, the cost of which he included in his estimate, was not consistent with the requirement that the material around the relevant culverts should be compacted by hand.
- 27 Beckhaus Civil submitted that Mr Wilde's evidence was that it was possible to perform the relevant rectification work around the two or three defective culverts using a Wacka-Packa fitted to an excavator or a wheel or vibrator attached to the excavator. It was submitted that no evidence had been led by the Council to contradict Mr Wilde's evidence or to suggest that the use of a Wacka-Packa as he proposed was not an appropriate manner of compacting the material around the culverts without exposing them to potential damage. It was not put to Mr Wilde that the work could not be done safely in this manner or that manual compaction was essential. Although it is true that Mr Beckhaus accepted that compaction work around the culverts had to be done by hand, he was never asked to explain precisely what that involved.
- 28 Mr Macartney's evidence, to which I have referred in [25] above and upon which the Council relied, is consistent with that of Mr Wilde, namely, that in effect the appropriate form of compaction around the relevant culverts was by a Wacka-Packa driven and held by hand.
- 29 Finally, it was not suggested by the Council that there was any specific requirement that compaction of material around the culverts had to be done by hand, whatever that meant. Furthermore, Ipp JA in his judgment of 4 August 2005 (at [110]) went no further than observing that soil in the immediate vicinity of and over the culverts could not be compacted by using "heavy machinery" the weight of which might damage the culverts. It was never suggested to Dr Truscott or Mr Wilde that a Wacka-Packa was heavy machinery.
- 30 In the light of the foregoing, in my view the challenge by the Council to the acceptance by the primary judge of Mr Wilde's evidence as to the cost of rectification around the culverts should be rejected.

The linear shrinkage issue

- 31 The Council's grounds of appeal with respect to this issue were as follows:
- "(a) His Honour erred by failing to consider himself bound by the express finding of the Court of Appeal that the Appellant had proved the matters in paragraph 157(b) and paragraph 157(d) of the Court of Appeal's judgment of 4 August 2005 and by the order that the outstanding matters remitted to his Honour be dealt with in accordance with the Court of Appeal's findings.
- (b) His Honour ought to have concluded that his Honour was bound by the Court of Appeal's conclusion that the Appellant had proved the matters in paragraph 157(b) and 157(d) of the Court of Appeal's judgment.
- (c) Further, or in the alternative, his Honour erred in concluding that the Court of Appeal 'was under misapprehension' when making its finding at paragraph 157(b) of the Court of Appeal's judgment of 4 August 2005."
- 32 I have already referred to the Specification's requirement that the material used in the construction of the levee embankment have a maximum linear shrinkage value of 12%. At [147]-[159] of his judgment of 4 August 2005, Ipp JA referred to tests conducted in October 2001 at the request of the then Council appointed superintendent, Mr Komp, to the subsequent tests carried out in April 2002 by Barnson on the one hand and Douglas Partners on the other and the further tests carried out by Golders in September 2003.
- 33 On the basis of those tests, the primary judge had found that it was difficult to conclude that there had not been some breach of the Specification. However, he had found that there had been substantial compliance with the Specifications with respect to linear shrinkage and that he was satisfied that in respect of that issue the levees were fit for their intended purpose. However, Ipp JA concluded (at [153]) that it was not to the point that the levees might be fit for their intended purpose: rather, the correct question was whether, in consequence of the breaches of the Specifications and, therefore, the contract, the Council had suffered damage.
- 34 His Honour then referred to the primary judge's finding that, apart from the northern levee, the test results were indicative of the 12% standard not having been achieved in the majority of cases. However, the question which the primary judge then asked himself was whether those results, given their small number, were sufficient to lead one to conclude that all of the levees did not meet the Specification's requirement. The answer to that question depended upon whether one could extrapolate such a result from the small number of tests. Ipp JA then observed: "The Master, having found that there had been a variety of failures and a variety of occasions when the specified tests were not met, said that the question to be asked was 'whether or not one can extrapolate any result across the

whole levee in respect of these results'. He found that the tests were insufficient in number to draw any inference as to shrinkage over an area greater than the specific areas where the failed tests were conducted."

35 His Honour continued in these terms (noting that in the present appeal the Council relied on [157(b) and (d)]:

"157 In my opinion, however, the correct approach in regard to the linear shrinkage issue is as follows. The onus was on the Council, as cross-claimant, to prove that Beckhaus breached the Contract by failing to comply with its obligation to construct the levee system with clay material having a maximum linear shrinkage value of 12%. In attempting to discharge this onus the Council proved:

(a) Beckhaus did not comply with its obligation to add 3% lime to all the material (Mr Rudge accepted that the addition of lime to soil can have an effect on its linear shrinkage).

(b) Although the linear shrinkage tests carried out during the course of the Contract showed that the 12% limit was met, certain of those tests, initially, would have failed had lime not been added to the areas tested and those areas reworked. This practice indicated that some areas did not, without reworking, qualify and detracted, generally, from the inference of contractual compliance that might otherwise have been drawn from the fact that the linear shrinkage tests required by the Contract passed.

(c) After Beckhaus had left the site, 53 linear shrinkage tests were carried out and a little over half of them failed.

(d) Professor Fell and Dr Truscott expressed the opinion that material, the linear shrinkage of which exceeded 12%, was not as effective as material where the linear shrinkage was 12% or less (although they could not quantify the difference). While Professor Fell and Dr Truscott could not say that the risk of failure of the levees was significantly changed by reason of the linear shrinkage being higher than 12%, they also could not say that the risk was not significantly changed.

(e) While Dr Burman and Dr Truscott accepted that there had been substantial compliance with linear shrinkage requirements, as regards the northern levee, it is by no means clear that they were aware of the fact that some of the testing that passed was based on test areas where lime had been added and the area reworked.

158 *By reason of the matters referred to in the previous paragraph, an evidentiary onus shifted to Beckhaus to prove that, despite them, the Council had sustained no damage. This was not the approach of the Master and, in my opinion, he erred in consequence thereof.*

159 *Accordingly, I would remit to Macready AsJ the issues involving the extent to which the levee system was constructed with material having a maximum linear shrinkage value of more than 12% and an assessment of the damages suffered by the Council in consequence of the levee system not being constructed with material that consistently complied with the 12% linear shrinkage requirement.*

160 *I reiterate that it will be entirely a matter for Macready AsJ as to whether any fresh evidence should be led on this issue, should any party wish to do so. There seems little doubt that the task of determining these questions will not be easy. There was no evidence that explained how and to what extent one could infer that a failed test in one particular place could be indicative of a failure in an area greater than that tested. In the end, Macready AsJ may simply have to do his best to determine these issues."*

36 The practice referred to by his Honour in [157(b)] appears to be a reference to what he had earlier written in the following paragraphs of his judgment:

"119 The integrity of the entire levee system is a matter of great importance to the town of Brewarrina. A whole levee bank might be breached by water penetration around a culvert and a levee might fail at any location where fill is sufficiently loose or cracks are sufficiently deep. Professor Fell, an expert witness for the Council, testified that only one layer of poorly compacted soil might give a path for seepage and initiation of erosion. This is common sense.

120 *In the light of the potential vulnerability of the area above and around culverts and the importance of the impermeable quality of the system as a whole, the relevance of the contractual requirements for testing at the culverts is self-evident. The purpose of these testing requirements was to give an appropriate degree of satisfaction to the Council as to the quality of the work done and the integrity of the system.*

121 *I accept the submission made by Beckhaus that the failure to carry out some of the tests does not necessarily mean that the works, when complete, do not substantially comply with the contractual standard. But, once it is established that there has been a failure to comply with the testing requirements, the evidentiary onus passes to Beckhaus to provide – by other evidence – the same degree of assurance as to the integrity of the system as would have been forthcoming had satisfactory test results been obtained in accordance with the frequency of testing under the Contract. Whether that assurance is to be derived from tests carried out subsequently, or from some other source, would be a matter for Beckhaus to establish.*

122 *Furthermore, due regard has to be paid to two other matters. Firstly, the failure by Beckhaus to comply with the obligation to add 3% lime to all material. This must give rise to at least a prima facie doubt that the levees had the qualities that the addition of lime to that extent would achieve.*

123 *Secondly, the circumstances under which the compaction tests (known as the "CETS" tests) were performed while Beckhaus was carrying out work under the Contract cast some doubt on the conclusions that otherwise would be*

drawn from the results of those tests. Some 340 CETS tests were carried out, in accordance with the Contract, in random places relating to the compaction levels on the levee system. All these tests passed, and Beckhaus submitted that these results, alone, provided a high degree of assurance that contractual standards had been met generally. After all, the Contract provided for the kind and quantity of compaction tests that would show, to the extent required by the Council, that the compaction work had been done properly, and these tests had been performed and satisfactory results had been achieved.

124 But, some of those tests only passed after the persons testing had indicated to Beckhaus that, in their view, a test at the particular place was likely to fail; Beckhaus then added lime and reworked the area; the test was then carried out and passed successfully. Mr Rudge explained:

'There was contested evidence before [the Master], which he accepted, that the CETS testers did not issue failing certificates. They were sufficiently experienced to tell, when they were on site, doing the in situ tests, that something was not properly compacted because of some deleterious material within the area, and that it would fail. They would then tell the foreman that that area was not going to pass, and the foreman would then arrange for it to be reworked, and then an adjacent or nearby area would be retested. If it looked as if it was going to pass, that sample was then taken back to the laboratory and, generally speaking, it did.'

125 This practice detracts from the degree of assurance that the successful CETS testing would otherwise have provided.

126 These two matters emphasise the need for Beckhaus to rebut the inference that arises from its failure to provide satisfactory test results as required by cl 3.8 and cl 8.9.3 of the specification."

37 The above paragraphs of his Honour's judgment were written under the heading "**The culverts**". Clauses 3.8 and 8.9.3 of the Specifications referred to by his Honour in [126] related to the question of compaction. Neither related to linear shrinkage.

38 However, under the heading "**Linear shrinkage**", his Honour observed:

"146 The Contract required testing of linear shrinkage. These tests were carried out by CETS. I have referred to CETS' practice not to issue failing certificates and to alert Beckhaus if they believed the soil was such that a test might fail. Thus, each of the tests of linear shrinkage required by the Contract passed."

39 It will be noted from [124] that Mr Rudge's explanation which his Honour set out related only to the CETS testers not issuing failing certificates with respect to compaction tests. On the other hand, the observation by his Honour in that paragraph immediately prior to his quoting of Mr Rudge's explanation, that where the testers considered that a test at a particular place was likely to fail, Beckhaus Civil would then add lime and rework the area after which the successful test was carried out, involved according to the primary judge in the first judgment on the remitter a misconception on the part of Ipp JA in that the first part of the first sentence of [124] related to compaction testing, whereas the second part related to linear shrinkage testing. The primary judge remarked at [13]-[15] that areas were not reworked where the 12% maximum linear shrinkage value was not met and that, as was described by Mr Rudge in the passage from his submissions recorded in [124] of Ipp JA's judgment, the practice of CETS related only to compaction tests. In particular, the primary judge observed (at [14]) "Because of the nature of the tests carried out in the field the tester was able to tell whether there would be a compaction failure. This procedure was not available in respect of tests for linear shrinkage because those tests required a sample to be taken back to the laboratory to be worked upon over a period of 24 hours to determine the result of the test. There was no possibility of ascertaining in the field whether or not the soil was likely to fail the linear shrinkage tests. If an area had failed a linear shrinkage test, then the relevant fill had to be excavated and reworked with more lime added in order to achieve an appropriate linear shrinkage."

40 The Council submitted that the effect of the primary judge's remark that the Court of Appeal was under a misapprehension as to the trial evidence on the issue of reworking areas to improve their linear shrinkage value, constituted a rejection by his Honour of Ipp JA's finding at [157(b)] of his judgment that the Council had proved the practice with respect to the CETS tests which indicated that some areas did not, without reworking, qualify and thus detracted generally from the inference of contractual compliance which might otherwise have been drawn from the fact that the linear shrinkage tests performed by CETS and required by the contract, had all passed. Whether Ipp JA's finding to that effect in [157(b)] was right or wrong, the primary judge was bound by it.

41 Whether or not the primary judge was correct in his observation that Ipp JA had misapprehended the practice in question by wrongly assuming that the CETS compaction test methodology also applied to the linear shrinkage tests performed by it, in my opinion a consideration of the primary judge's reasons on the issue of linear shrinkage reveals that those observations played no part in his determination of the issue. In this respect [13]-[15] of his judgment to which I have referred in [40] are preceded by the heading

"The extent to which the levees constructed by Beckhaus did not comply with the requirement of 12% maximum linear shrinkage, and the costs of rectifying the work that was defective in this respect"

These were the precise terms of remitted issue (ii) and, as his Honour observed in [9], it was the most contentious area at the re-hearing.

42 After setting out [155]-[160] of Ipp JA's judgment, the primary judge noted (at [11]-[12]) that each party took a different stance before him as to what was the ambit of his discretion on the rehearing given that no further evidence was to be called by either party. In this respect, Beckhaus Civil submitted that the matter was at large

and that it was at liberty to re-argue the question of whether there had been any breach at all of the linear shrinkage requirement of the Specification upon the existing evidence.

43 On the other hand the Council took the stance that as no new evidence was advanced, the primary judge was bound by the Court of Appeal's ruling at [158] of Ipp JA's judgment that the evidentiary onus had shifted to Beckhaus to prove that the Council had sustained no damage and because they failed to call any further evidence, that evidentiary onus had not been discharged. As it was bound by the rulings in [157] of the judgment, the Council submitted that Beckhaus Civil's attempt to re-agitate the matter of liability for breach was not open to it.

44 It was in this context that the primary judge then observed (at [13] of the first judgment) that the difference between the parties was a matter of real consequence because of the misapprehension to which he had referred on the issue of reworking areas to improve their linear shrinkage value. However, after detailing the nature of the suggested misapprehension, including references to the various tests which had been carried out, his Honour concluded that such matters were serious ones to be considered *"if it is appropriate that I approach the matter in the way suggested by Beckhaus"*. (Emphasis added.)

45 However, it is clear that his Honour rejected Beckhaus Civil's contention. In [20] he observed that when deciding which approach to take, the critical matter was the issue which had been remitted to him for further consideration and which had been identified in the formal order of the Court of Appeal and in [159] of Ipp JA's judgment.

46 The primary judge thus concluded (at [21]) that *"[p]lainly I have to assume that the evidence shows that the levees do not comply and I have to determine the extent to which they do not comply."*

47 In the following paragraphs of the first judgment ([22]-[28]), his Honour proceeded to determine on the basis of Dr Burman's and Dr Truscott's evidence, the extent of compliance by the levees other than the northern levee in respect of which, on their evidence, his Honour was satisfied that no rectification work was required to be performed.

48 His Honour then identified the areas of the other levees to be rectified as being
(a) between chainages 168 and 300 with respect to the Charleton Road levee;
(b) between chainages 220 and 250 of the Tarrion Creek levee;
(c) all of the southern levee; and
(d) between chainages 180 and 220 and chainages 725 and 765 respectively of the North Brewarrina levee.

49 Although the Council complained that the primary judge should have found that the extent of non-compliance (other than with respect to the southern levee, the whole of which he found to have failed) was greater than that which he had identified between the various chainages, it is clear that his findings in this respect were consistent with those of Ipp JA in his judgment of 4 August 2005.

Thus in [172] of his judgment, Ipp JA observed

"172 The extent of the rectification required to ensure that the 12% linear shrinkage requirement is met is presently unknown. In the light of the evidence that a substantial part of the levees comply with the 12% requirement, the costs of rectification may well include only the removal or demolition of a small part of the structure in rectifying the material and compaction in those particular areas."

50 To similar effect was his Honour's observation at [179] where he said:

"179. ...The significant requirement of the levees being constructed in accordance with the compaction specifications laid down by the Contract has been complied with. On the evidence, the defects in relation to the culverts can be remedied at a cost of not more than about \$100,000. The problems with linear shrinkage do not appear to range over more than a minor part of the levees (having regard to the CETS tests that passed without the areas having to be first re-worked). Moreover, the evidence establishes that a failure to comply with the linear shrinkage requirement has only a general effect on the quality of the levees as a whole and may well not lead to the levees being, to any significant extent, less stable or more permeable."

51 It follows from the foregoing that whether or not the primary judge erred in concluding that the Court of Appeal "was under a misapprehension" as to the relevant testing practice when making the finding set out in [157(b)] of Ipp JA's judgment of 4 August 2005, the primary judge only regarded any such misapprehension as being a serious matter "if" it was appropriate that he approach the remitted issue in the manner suggested by Beckhaus Civil, namely, that the matter was at large and it was open to him to find that there had been no breach based upon the existing evidence of the linear shrinkage requirement.

52 As his Honour rejected that approach and proceeded upon the basis, supported by his actual findings, that there had been non-compliance with the linear shrinkage requirements of the Specification in respect of the whole of the southern levee and in respect of parts of the other levees (other than the northern levy), it follows that the primary judge was true to the remittal order that he determine the extent to which the levees constructed by Beckhaus Civil did not comply with the requirement of 12% maximum linear shrinkage. It follows in my opinion that the Council's challenge to this aspect of the primary judge's decision should be rejected.

53 Although not one of its grounds of appeal on the linear shrinkage issue, in oral argument the Council submitted that the primary judge, in making his findings in [24]-[28] of the first judgment, had reversed the onus which,

according to Ipp JA in his judgment of 4 August 2005, lay upon Beckhaus Civil and not the Council. In this respect, reference was made to [158] of Ipp JA's judgment where he concluded that:

"By reason of the matters referred to in the previous paragraph [157], an evidentiary onus shifted to Beckhaus Civil to prove that, despite them, the Council had sustained no damage." (emphasis added)

It was submitted that that onus had not been discharged with the result that the primary judge had departed from the question which had been remitted to him on the linear shrinkage issue.

- 54 In my opinion there is no substance in this contention. As Ipp JA noted in the second sentence of [157] of his judgment, the onus was on the Council to prove that Beckhaus Civil breached the contract by failing to comply with its obligation to construct the levee system of clay material having a maximum linear shrinkage value of 12%. The matters proved by the Council listed by his Honour in subparagraphs (a)-(e) of [157] were sufficient to cast any evidentiary onus onto Beckhaus Civil to prove that despite those matters, the Council had suffered no damage.
- 55 The fact that that evidentiary onus was not discharged by Beckhaus Civil only led to the conclusion that the Council had indeed suffered damage which, by the remittal order, the primary judge was required to assess. At the end of the day the onus still lay upon the Council to establish the extent of the defective work and the cost of rectifying it. The primary judge considered all the relevant evidence and determined the very issue remitted to him namely, the extent to which the levies constructed by Beckhaus Civil did not comply with the linear shrinkage requirement and the cost of rectifying the work that was defective in that respect.
- 56 In my opinion, there has been no departure by the primary judge from the terms of the remittal order with the result that no error has been demonstrated in the manner in which his Honour determined the linear shrinkage issue remitted to him.

The measure of damages

- 57 Ground 6 of the Council's Grounds of Appeal is as follows: *"His Honour ought to have awarded damages to the [Council] for the cost of carrying out work necessary to bring the levees into compliance with the requirements of the contract."*
- 58 Under the heading **"The assessment of damages for rectification costs"**, Ipp JA observed in his 4 August 2005 judgment:
- "170 The measure of damage under both these heads is the cost of the work reasonably required to make the levee embankments conform to the requirements of the Contract, subject to the qualification, expressed in **Bellgrove v Eldridge** (1954) 90 CLR 613 at 618 by Dixon CJ, Webb and Taylor JJ, namely:*
- 'The qualification, however, to which this rule is subject is that, not only must the work undertaken be necessary to produce conformity, but that also, it must be a reasonable course to adopt.'*"
- 59 Ipp JA then referred (at [173]) to an issue between the parties as to the relevance of the Council's failure to lead any evidence showing that it intended to rectify the levees in accordance with the contract. At [174] he held that an intention to rebuild or to rectify was not relevant to the measure of damages citing **Bellgrove** at 620. His Honour then referred to the decision of the House of Lords in **Ruxley Electronics & Constructions Ltd v Forsyth** [1996] 1 AC 344 to the effect that intention to rebuild was relevant to reasonableness in the context of what reinstatement works should be allowed and hence the extent of the loss which had been sustained.
- 60 The remarks of their Lordships were made in the context of a plaintiff having suffered little or no monetary loss in the reduction of value of his land. However, as Ipp JA observed in the present case, there was no question of the Council suing for diminution in value and therefore no question of reinstatement being required by reason of factors such as extravagance of taste. He continued (at [176]):
- "Here we have a situation where the integrity of the levees is a matter of public interest and, in particular, of significant relevance to the welfare of the citizens of Brewarrina. In my view, the Council, in these circumstances, is entitled to the cost of rectification without having to prove that it intends to rectify the works. The general rule expressed in **Bellgrove v Eldridge** at 620 applies."*
- 61 The Council submitted that this last reference left no room in the present case for the operation of the qualification in **Bellgrove** to the rule that the work undertaken must be necessary to produce conformity, namely, that that work must be a reasonable course to adopt. However, in my opinion it is clear that Ipp JA did not intend his remark in [176] to have the effect contended for.
- 62 The primary judge dealt with the measure of damages in the second judgment. After identifying the areas of the levees to be rectified due to the extent of their failure to comply with the linear shrinkage specification, his Honour observed that in accordance with the principle laid down in **Bellgrove**, the appropriate measure of the cost of rectification was that of bringing the work into conformity with the Specifications provided that such rectification was a reasonable course to adopt. In this respect he considered that that proviso was of some importance in the present case.
- 63 His Honour then set out the following further passage in the joint judgment of Dixon CJ, Webb and Taylor JJ in **Bellgrove** at 618-619:

"The qualification, however, to which this rule is subject is that, not only must the work undertaken be necessary to produce conformity, but that also, it must be a reasonable course to adopt. No one would doubt that where pursuant to a building contract calling for the erection of a house with cement rendered external walls of second-hand bricks, the builder has constructed the walls of new bricks of first quality the owner would not be entitled to the cost of demolishing the walls and re-erecting them in second-hand bricks. In such circumstances the work of demolition and re-erection would be quite unreasonable or it would, to use a term current in the United States, constitute 'economic waste' (see Restatement of the Law of Contracts, (1932) par.346). We prefer, however, to think that the building owner's right to undertake remedial works at the expense of a building is not subject to any limit other than is to be found in the expressions 'necessary' and 'reasonable' for the expression 'economic waste' appears to us to go too far and would deny to a building owner the right to demolish a structure which, though satisfactory as a structure of a particular type, is quite different in character from that called for by the contract. Many examples may, of course, be given of remedial work, which though necessary to produce conformity would not constitute a reasonable method of dealing with the situation and in such cases the true measure of the building owner's loss will be the diminution in value, if any, produced by the departure from the plans and specifications or by the defective workmanship or materials."

64 The primary judge then referred to Dr Truscott's evidence which dealt with the question of rectification of the levees due to non-compliance with the linear shrinkage specification and in which he had advanced three options, which his Honour summarised as follows:

Option 1: Using sand filters as the primary method of protection.

Option 2: Removal, treatment and replacement of material to the "wet" side of the levees.

Option 3: Total reconstruction of the new sections of levees by removal, treatment, placement and re-compaction of the existing in place-material.

The debate before his Honour was between Options 2 and 3, the latter of which, he noted, was more expensive than the former (an observation which, so the Council submitted, was irrelevant).

65 The primary judge then observed that in [3] of the final judgment (see [19] above) he had dealt with the different options when dealing with the culverts. However, he noted that it was important to realise that the experts' views on the question of rectification of the culverts involving the issue of compaction were different to their views on linear shrinkage. Accordingly, it was necessary to decide which of the two options should be employed in respect of the rectification of those parts of the levees which he had identified as failing the linear shrinkage test.

66 With respect to Option 2, his Honour set out the following passage from Dr Truscott's damages report with respect to the Charleton Road and Tarrion Creek levees: "Remove the outer 4m of the levee bank on the wet side, excavate a key trench and replace with 4m width of properly treated zone A clay fill compacted in 300mm layers to a minimum of 95% density ratio."

Dr Truscott also applied the option encapsulated in this paragraph to the other levees.

67 The primary judge then referred to the evidence of Dr Burman, Beckhaus Civil's expert. With respect to the northern and southern levees, Dr Burman reported:

"Remove fill to the width placed by Beckhaus Civil on the wet batter, including fill placed in key trenches and stockpiled for re-use.

...

Condition and treat stockpiled fill and new borrow material with lime as necessary to satisfy the 12% lineal shrinkage specification requirement. These fill materials are likely to be at about the 12% lineal shrinkage value and may require little or not addition of lime.

Compact as specified on the wet batter and in key trench to the design profile ...

...

The equivalence of these works to the PPK design is based on the premise of the downstream overlay as ineffective in relation to water retention capacity."

The reference to the "downstream overlay" is to the overlay on the dry side of the levee. Dr Berman proposed a similar method of rectification for the North Brewarrina and Charlton Road levees.

68 The primary judge then referred to the need to also replace the dry side batter which was addressed in cross-examination with Dr Truscott and referred to in his report in reply. Dr Truscott had said: "There has apparently been a misunderstanding of my recommendation that the northern, southern and North Brewarrina have a common set of remedial measures. The intention, as shown in my report, was that they would be treated with overlays."

69 After referring to Dr Burman's review of the design work by PPK, Dr Truscott continued:

"On the other hand, if the overlays, particularly the upstream overlay, has been built in accordance with the contract requirements, the seal would have been provided. [The upstream overlay is the wet side of the levy]

Dr Burman states that the downstream overlay is of little use other than to flatten the slope and on this basis should not be included in any remedial work. On the basis that the important matter is cost, I do not agree."

- 70 The primary judge then set out the cross-examination of Dr Truscott in the following exchange:
- “Q. If we deal with the northern and southern levees, you understand that Dr Burman says that it is only necessary to replace the overlay required by the PPK design on the wet side, you want to replace it all on the dry side, don't you. And you understand this question is put on the basis that contrary to our case, there is a need to do anything with these levees?”*
- A. Of course. I guess --*
- Q. You understand that those are the two competing positions?”*
- A. Yes. I don't believe I have said that we should replace the dry side. I don't think I have actually – I don't believe it. But I guess, the only difference I see between Dr Burman and myself on the levees is that if you are going to build a new overlay on the wet side, then it has to be wide enough that you compact it. This means either you make it a bit wider than it was originally or you overbuild and cut back. I don't believe there is a big difference between the two of us.*
- Q. In any event, just to be clear, you don't say that the overlay on the dry side of the northern and southern levees has to be replaced?”*
- A. Excluding things like culverts, yes, but I presume that is excluded.*
- Q. You are referring to culverts. You have heard that question and answer read back. I think just to be clear, you agree with my proposition about no need to replace on the dry side with the exception of the culverts?”*
- A. Yes I agree, subject to – no, I agree.”*
- 71 His Honour then concluded that it *“thus seems quite clear that in the end both experts agree it was appropriate to replace only the wet side of the batter. The process of decision in this Court has identified the relevant faults in the levees and thus according to Dr Truscott the rebuilt levees using Option 2 will have approximately the same level of safety as the levies built to the specified requirements. In those circumstances it seems to me that all that is reasonable and necessary to do is to use Option 2.”*
- 72 When dealing with the question of quantum, the primary judge noted that the only evidence based on Option 2 was that of Mr Wilde. The Council had chosen to call quantum evidence only on the cost of total replacement. It made a tactical decision to mount an argument that total replacement was called for and therefore did not tender evidence on any alternative.
- 73 Having concluded that total replacement (that is, of both the wet and dry sides of the batter) was unreasonable and that replacement of the wet side between the relevant chainages where non-compliance had been identified by him was appropriate, his Honour determined the cost of rectification of the defective work in respect of linear shrinkage in the sum assessed by Mr Wilde of \$252,190.19.
- 74 The Council submitted that rectification of only the wet side of the relevant levees was inconsistent with the contract and the findings of this Court in the August 2004 judgment. It submitted that his Honour erred in applying the proviso in *Bellgrove* by limiting the measure of damages to the cost of replacement of the wet side of the batter only.
- 75 It was further submitted that in essence his Honour had created a *“hybrid”* remedy that was never tested by the evidence or put to the experts. This was because the Truscott options never purported to be discrete, *“stand alone”* measures for remediation of the levees. In particular, it was submitted that Option 2 included vertical and horizontal sand filters of the culverts but did not include vertical sand filters for whole of the length of the levees, however it did include re-compaction and remediation for the whole length of the wet side of the levees and not just those parts of it identified by the primary judge as requiring rectification. Option 3 provided for total remediation.
- 76 It was therefore submitted that Dr Truscott's option with respect to remediation of the wet side only was manifestly on the basis that sand filters would be included. His Honour assessed the cost of rectification around the culverts without sand filters, in which event he should not have confined the cost of rectification of the levee batters to the wet side only.
- 77 In its written submissions in reply to those of Beckhaus Civil, the Council conceded that Dr Truscott did not require the replacement of the dry side of the levees. However, this was premised so it was contended, on the *“whole of the wet side (4m wide)”* being replaced and not merely the isolated locations identified by the primary judge. Reference was made to Dr Burman's evidence that replacement of the wet side *“over the full length”* of the levees could obviate the need for remediation of the dry side. Reliance was also placed upon Dr Truscott's evidence that the only difference between himself and Dr Burman on the rectification of the levees was that if you were going to build a new overlay on the wet side then it had to be wide enough that you could compact it. The difference between the experts was whether the new overlay on the wet side should be 4 metres or 2 metres wide.
- 78 The Council submitted that the measure of damages awarded by the primary judge was not a *“new overlay on the wet side”* notwithstanding that he agreed with Dr Truscott that it should be 4 metres wide at the top. The Council reiterated its written submissions in chief that Option 2 was dependant upon rectification works including sand filters at the culverts and the replacement of the **whole** of the length of the wet side to a width of 4 metres. In the absence of adopting this option **in its entirety**, the measure of damages ought to have reflected the

Specifications. The primary judge therefore erred by ordering rectification of the culverts **without** sand filters and ordering rectification of the wet side of the levees only in isolated areas.

- 79 So far as the assertion that the primary judge determined the cost of rectification of the culverts without sand filters is concerned, it must be remembered that the remitted issue with respect to the culverts was one of compaction and was unrelated to the question of linear shrinkage. In any event his Honour determined to adopt the option that the rectification work for the culverts should be replacement in accordance with the terms of the contract. No complaint was made by the Council when challenging his Honour's determination of the cost of rectification of the culverts based on any suggestion that he had failed to require the provision of vertical and horizontal sand filters at the culverts. The Council's challenge was confined to the issue of hand compaction.
- 80 In oral submissions the Council's case on the measure of damages underwent a shift of emphasis. It was submitted that the proviso, as it was termed, articulated in **Bellgrove** had no application in that the rectification of the dry side of the batter was not only necessary to produce conformity with the Specifications but was also a reasonable course to adopt. The present case was significantly different from the type of case exemplified in the passage from the judgment of the High Court referred to by the primary judge and which I have set out in [64] above and relating to the erection of a house with specified cement rendered external walls of second hand bricks, having in fact been constructed with new, top quality bricks.
- 81 The Council pointed to the next succeeding paragraph in the joint judgment in **Bellgrove** to that which I have recorded in [63] above where their Honours said: "As to what remedial work is both 'necessary' and 'reasonable' in any particular case is a question of fact. That the question whether demolition and re-erection is a reasonable method of remedying defects does not arise when defective foundations seriously threaten the stability of the house and when the threat can be removed only by such a course. That work, in some circumstances, is obviously reasonable and in our opinion, may be undertaken at the expense of the builder."
- 82 **Bellgrove** was applied by this Court in **Murphy v Brown** (1985) 1 NSWLR 131. At 133, Mahoney JA with whom Hope JA agreed, observed: "But there is a further rule which operates by way of qualification of the general principle. Where a plaintiff claims the cost of the work necessary to put him or his property in the pre-injury condition, the work must not merely be necessary for that purpose but 'it must be a reasonable course to adopt' to do that work: **Bellgrove v Eldridge** (1954) 90 CLR 613 at 618. And, as the defendants argument here suggested, it will not normally be reasonable to spend, for example, \$4000 to restore a vehicle which, undamaged, was worth, say, \$1000. "
- 83 In **Casbee Properties Pty Ltd v Patoka Pty Ltd** [2003] NSWCA 361, Giles JA, with whom Mason P and McColl JA agreed, observed (at [56]) that **Bellgrove** was concerned with the alternative measures of loss being either the cost of rectification or difference in value. In the case of loss due to failure to comply with the building contract, the relevant loss was measured by ascertaining the amount required to rectify the defects complained of so as to give the building owner the equivalent of a building which was substantially in accordance with the contract. That was subject to the qualification that the work undertaken must be a reasonable course to adopt. His Honour then set out the passage from **Bellgrove** which I have recorded in [64] above.
- 84 The relevant issue in **Casbee** related to the report of an arbitrator in which, according to Giles JA, he appeared to have accepted that the design as found in the drawings and which was therefore contractually mandated, called for the construction of certain table drains on the low side of the driveway to the building. In fact the contractor had constructed the drains on the high side of the driveway which, so the Arbitrator found, was in accordance with good engineering practice. Accordingly, he found that constructing the drain on the high side "was not defective".
- 85 Assuming that the Arbitrator found that there was a failure to comply with the contract, the judge at first instance in adopting the Arbitrator's report understood him to mean, when he concluded that the contractor's action in placing the drains on the high side was not defective, that it was not reasonable for the principal to insist on compliance with the contract: that is, that it was not a reasonable course for the principal to construct the table drains on the low side of the driveway.
- 86 Giles JA concluded in these terms (at [60]): "It was not necessary that [the Arbitrator] express his conclusion in those words, and **Bellgrove v Eldridge**, like any judgment, is not to be treated like a statute for the application of its words. No doubt [the Arbitrator] was addressed on **Bellgrove v Eldridge**. Whether it was a reasonable course for the principal (sic – contractor) to construct the table drain on the high side of the driveway depended on the engineering purpose of the table drains. [The Arbitrator] found that the purpose was served by construction of the table drains on the high side of the driveway: the drains 'should have been designed and constructed on the high side'. Implicitly, the purpose was not served by construction of the table drains on the low side of the driveways, and so construction of the table drain on the low side of the driveway was not a reasonable method of dealing with the departure from the contract. This was a finding of fact. I do not think the judge's understanding of the report in this respect could be said to be in error. He was entitled in the exercise of his discretion to adopt [the Arbitrator's] finding of fact."
- 87 **Bellgrove** was also referred to by Debelle J in **South Parklands Hockey & Tennis Centre Inc v Brown Falkiner Group Pty Ltd** [2004] SASC 81 at [90] where his Honour observed: "It is well established that a court will not order damages for rectification where the proposed remedial work is not a reasonable course to adopt: **Bellgrove v Eldridge** (1954) 90 CLR 613 at 617-619. One example is where the expenditure on the proposed rectification is out of all proportion to the benefit to be obtained: **Ruxley Electronics & Construction Ltd v Forsyth** (1996) 1 AC 344."

88 Finally, I would refer to the decision of this Court in *Scott Carver Pty Ltd v SAS Trustee Corporation* [2005] NSWCA 462 where Ipp JA, after referring to the passages in *Bellgrove* which I have cited above, observed (at [120]): “In my view, the qualification expressed in *Bellgrove v Eldridge* at 618 (namely, that the rectification work must be a reasonable course to adopt), is aimed at determining whether the cost of remedying the defect is out of proportion to the achievement of the contractual objective. As Lord Jauncey said in *Ruxley Electronics Ltd v Forsyth* [1996] 1 AC 344 at 358:

‘[I]n taking reasonableness into account in determining the extent of loss, it is reasonableness in relation to the particular contract and not at large.’ “

89 In summary, the authorities to which I have referred stand for the proposition that whether the rectification work is a reasonable course to adopt is dependant upon a finding of fact that the proposed work was reasonable in order to achieve the contractual objective. The rectification work would be unreasonable if it was out of all proportion to the achievement of that objective or to the benefit to be obtained therefrom.

90 In the present case, subject to one matter, there was no challenge to the primary judge’s finding that both experts considered that it was appropriate to replace only the wet side of the batter and to adopt Option 2 which proposed only that extent of rectification required to achieve approximately the same level of safety as if the levees had been built to the specified requirements. Dr Truscott’s evidence in cross-examination as extracted by the primary judge (see [71] above) made it clear that he saw no need to replace the dry site of the batter with the exception of the culverts. The inference was clear that if there was no such need, then Dr Truscott did not consider that it was either necessary or reasonable to achieve the objective of the linear shrinkage specification to replace the dry or downstream side of the batter within the chainages identified by the primary judge.

91 Furthermore, whereas Mr Wilde costed the rectification work identified by the primary judge based on replacement of the wet side of the batter only in the sum of \$252,190.19, in his report of 12 December 2005 in reply to Mr Driml’s report of 7 December 2005, he costed the same work (including both the wet and dry sides) in the sum of \$453,486 – which was 80% greater than the cost determined by Mr Wilde with respect to replacement only of the wet side of the batter.

92 The inference to be drawn from Dr Truscott’s evidence was that there was no need to replace the dry side and that to do so would neither achieve the objective of the levee nor provide any relevant additional capacity to the levee to withstand the flooding of the river. Bearing in mind the observation by Ipp JA [at [179]] that the evidence established “that a failure to comply with the linear shrinkage requirement has only a general effect on the quality of the levees as a whole and may well not lead to the levees being, to any significant extent, less stable or more permeable.”

it follows, in my opinion, that to require the additional expenditure of \$201,296 would be out of all proportion to the benefit to be achieved by that expenditure and, further, would not enhance the contractual objective which would be satisfactorily achieved by the rectification work being confined to the wet side of the batter.

93 The position is *a fortiori* on the basis of Mr Driml’s costing of the replacement of both sides of the levees being the whole cross-section of the new levees and the whole of the overlays on both sides of the southern levee and which he quantified at \$927,922.

94 Although as I have indicated, the Council in its written submissions submitted that Dr Truscott’s Option 2 related to the remediation of the whole of the length of the wet side of the relevant levees, there was nothing in his evidence to support the proposition that if it was found that the non-compliance with the lineal shrinkage requirement of the Specification extended only to parts of the length of the levees rather than to their total length, he would have opined that there was a need to remediate both the dry and wet sides of those sections of the levee which failed to comply with that requirement.

95 It is not surprising that there was no such evidence. It would have been illogical for Dr Truscott to have suggested that merely because only part of the length of a particular levee was defective that the rectification of that part required remediation on both the wet and dry sides thereof whereas if the whole of the length of the levee was defective, remediation could have been confined to the wet side. Such an assertion would be nonsensical.

96 I am prepared to accept that Dr Truscott’s evidence assumed that the extent of the non-compliance related to the whole of the length of the wet side of the levee and that on that basis the whole of the wet side required remediation. But it does not follow that once it was determined that only part of the length of the levee failed to comply, Dr Truscott would have required, for no obvious reason, that the rectification works extend both to the wet and dry side of the defective section. The fact remains that both experts agreed that rectification of the wet side only would have provided the levees with equivalent security of levees constructed in conformity with the Specification. Rectification was only required with respect to those parts of the levees which were defective. Those parts that were not defective conformed to the Specifications and required no rectification.

97 In my opinion, the Council’s contention with respect to Dr Truscott’s evidence and the assumption upon which he expressed the view that there was no need to replace the dry side of the batter is without foundation. Accordingly the Council’s challenge to the primary judge’s determination as to the measure of its damage with respect to the cost of the necessary rectification work done to the failure of the levees as identified by his Honour to comply with the Specification with respect to the linear shrinkage, should be rejected.

The payment of interest

- 98 The Council's grounds of appeal with respect to this issue were as follows:
- “(a) His Honour failed to award the [Council] interest on that part of the sum of \$702,678 (received by [Beckhaus Civil] from the [Council] on 18 November 2002) which [Beckhaus Civil] was required to repay to the [Council] and thus the exercise of his Honour's discretion to award interest miscarried.
- (b) His Honour should not have awarded [Beckhaus Civil] interest on any part of the sum of \$702,678, received by it from the [Council] on 18 November 2002, which [Beckhaus Civil] was not entitled to retain on a final basis.
- (c) His Honour erred in calculating interest on the basis of an interim entitlement to a progress claim, and ought to have determined interest on the basis of the final right to payment of either party.”
- 99 In the third judgment the primary judge awarded Beckhaus Civil interest on the amount of \$702,678.45 from 10 May 2002 when the entitlement to Progress Payment No.7 arose under the 1999 Act by reason of the Council's failure to serve a payment schedule in time, to 15 March 2004 being the date upon which it was agreed the contract was terminated. He also ordered that on and from 16 March 2004 interest should be payable on the sum of \$205,707 being the amount to which Beckhaus Civil was entitled upon the taking of final accounts. These figures were varied in the final orders that were made but, for the purposes of determining the questions of principle which arose on the appeal with respect to the issue of interest, the differences in the figures do not matter.
- 100 The Council submitted that although Beckhaus Civil had an interim entitlement to payment of the sum of \$702,678.45, at the final hearing the primary judge had concluded that it was not entitled to that amount but only to the lesser amount of \$205,707. Accordingly, so it was submitted, having lost the difference between \$702,678.45 and \$205,707, it also lost any entitlement to interest on that difference which it otherwise might have had with respect to its interim entitlement to the larger amount.
- 101 The Council accepted that its payment to Beckhaus Civil on 18 November 2002 of the sum of \$702,678.45 was subject to the condition that it was secured by a bank guarantee without which the Council would not have paid Progress Claim No.7. Furthermore, by reason of the conditions placed by the bank on its guarantee, the \$702,678.45 was required to be placed on interest bearing deposit as a consequence whereof Beckhaus Civil did not have access to the funds represented by the payment for use in its day to day operations.
- 102 Accordingly, the Council submitted that Beckhaus Civil was only ever entitled to \$205,707 as and from 10 May 2002 and not \$702,678.45. Interest on that amount from 10 May 2002 up to the date of the primary judge's final orders on 21 December 2005, at the rate of 9% (being the appropriate rate under the *Uniform Civil Procedure Rules*, Schedule 5) totalled \$65,658.30 from which interest of \$5,707 earned on the interest bearing deposit of \$702,729 since 18 November 2002 should be deducted.
- 103 The Council further submitted that the effect of the primary judge's final orders was that Beckhaus Civil was required to pay to the Council by way of rectification costs the sum of \$481,207. As that amount constituted part of the interim payment of \$702,678.45 paid by the Council to Beckhaus Civil on 18 November 2002 to which the latter had no entitlement on a final basis, it followed that the Council had been deprived of the benefit of that sum since that date and was therefore entitled to interest on that amount calculated from 18 November 2002 subject to the deduction of interest actually earned since that date on that sum.
- 104 Beckhaus Civil filed a Notice of Contention in the following terms: *“If the primary judge erred in awarding Beckhaus Civil interest on the sum of \$702,678 pursuant to s.11 of the Building & Construction Industry Security of Payment Act 1999, Beckhaus Civil was nevertheless entitled to that interest pursuant to clause 42.9 of the General Conditions of Contract.”*
- 105 Clause 42.9 of the General Conditions of Contract provided for interest to be paid on unpaid monies after the date on which they should have been paid at *“current commercial bank rates”*. Although in his judgment of 7 December 2004 the primary judge addressed in [99]-[104] Beckhaus Civil's entitlement to interest pursuant to cl.42.9 thereof, he did not rely on that provision when awarding interest in the third judgment. Rather, he held that notwithstanding the termination of the contract on 15 March 2004 and the effect of s.32 of the 1999 Act, Beckhaus Civil had an accrued entitlement to interest under s.11(2)(b) of that Act which was not displaced by the final orders made in the proceedings.
- 106 Beckhaus Civil submitted that the determination by the primary judge on a final basis of its entitlements did not deny the proposition that whilst the contract remained on foot, it was entitled to the benefit of the full amount of Progress Claim No.7 which, under the 1999 Act, the Council was bound to pay. Had Progress Claim No.7 been paid and had Beckhaus Civil had the benefit of the amount so paid until the final determination of the dispute between the parties on 21 December 2005, any question of restitution pursuant to s.32(3)(b) of that Act was discretionary.
- 107 In its written submissions in reply the Council did not dispute that interest was payable on Progress Payment No.7 pursuant to cl.42.9 of the General Conditions of Contract. However, it submitted that just as a progress payment is an interim payment under the 1999 Act, so too was interest paid or payable under cl.42.9 on an amount due as a progress payment. Accordingly, if Beckhaus Civil lost the right to retain the progress payment on a final basis, it also lost the ancillary right to retain (or if unpaid, recover) any interest on the progress payment on a final basis.
- 108 In my opinion the appellant's Notice of Contention should be upheld. Whatever the merits or demerits of the Council's submissions with respect to the payment of interest pursuant to s.11(2)(b) of the 1999 Act and the effect

thereon of s.32 of that Act, there can be no doubt that cl.42.9 operated independently of that Act and obligated the Council to pay interest on the unpaid Progress Payment No.7. Furthermore, there was nothing in the contract that required that interest to be either repaid or reduced merely by virtue of the fact that in proceedings to determine the final position between the parties, it was determined that the amount of that progress payment should be off-set by damages to which the Council was entitled for breach of contract.

- 109 Accordingly, in my opinion his Honour was entitled to award Beckhaus Civil interest on the terms reflected in the third judgment and in the final orders he made on 21 December 2005.
- 110 As to the Council's submission that it was entitled to interest on the \$481,207, Beckhaus Civil's response to that claim was that that sum, being the cost of rectification of the levees as found by the primary judge, was a cost which was determined in terms of the 2005 value of the dollar as a consequence whereof there would be double dipping if, on that amount, the Council was entitled to interest between 18 November 2002 and 21 December 2005. It would only be entitled to interest in those circumstances if the cost of rectification had been determined in terms of the value of the dollar in 2002.
- 111 In my opinion, this submission should be accepted and, in fact, was not challenged in the Council's oral argument on the appeal.

Conclusion

- 112 In my opinion each of the Council's challenges to the relevant findings of the primary judge have failed. No error of the nature of those alleged in the grounds of appeal has been established. Accordingly, I would propose that the appeal be dismissed with costs.
- 113 **McCOLL JA:** I agree with Tobias JA.

A: B Walker SC / M Christie / V Culkoff instructed by Paul Ward-Harvey & Co, Sydney
R: Mr Rudge SC / D Robertson instructed by Dutton Lawyers, Newcastle