

QUEENSLAND CIVIL AND ADMINISTRATIVE TRIBUNAL

CITATION: *Lawless v Queensland Building and Construction Commission* [2019] QCAT 32

PARTIES: **AMANDA GAY LAWLESS**
(applicant)
v
QUEENSLAND BUILDING AND CONSTRUCTION COMMISSION
(respondent)

APPLICATION NO/S: GAR049-16

MATTER TYPE: General administrative review matters

DELIVERED ON: 18 February 2019

HEARING DATE: 23 October 2017

HEARD AT: Maroochydore

DECISION OF: Member Ann Fitzpatrick

ORDERS:

1. **The decision of the respondent, Queensland Building and Construction Commission, made 13 January 2016 is confirmed in relation to its direction to the builder Ducon Pty Ltd to rectify damaged stormwater drainage pipes and to install flexible fittings. The decision is otherwise amended as set out in the following orders.**
2. **The Queensland Building and Construction Commission direct rectification of vertical control joints to comply with AS4773, such direction to be made to the licensed contractor who retro-fitted the vertical control joints or to such other licensed contractor as the QBCC may choose in accordance with s 71A of the *Queensland Building and Construction Commission Act 1991* (Qld).**
3. **The Queensland Building and Construction Commission direct Ducon Pty Ltd to repair two category 2 cracks noted in the Flanagan Report 4585, dated August 2016 as:**
 - (a) **defects 16,17 and 18, being one long crack; and**
 - (b) **defect 28.**

Alternatively, the work be performed under the statutory insurance scheme.

**All repair work to match existing wall texture
and repainting to match existing colour.**

CATCHWORDS: PROFESSIONS AND TRADES – BUILDERS –
STATUTORY POWER TO REQUIRE
RECTIFICATION OF DEFECTIVE OR INCOMPLETE
BUILDING WORK – whether evidence of defective
building work – causes of cracking in dwelling – whether
consequential damage occurred – whether fair to direct
builder to rectify – where builder in liquidation

ADMINISTRATIVE LAW – ADMINISTRATIVE
TRIBUNALS – QUEENSLAND CIVIL AND
ADMINISTRATIVE TRIBUNAL – where delay through
no fault of the applicant – sufficient reason for extension
of time for making a direction

Queensland Building and Construction Commission Act
1991 (Qld), s 71H, s 72, s 72A(4), s 86(1)(e), s 87
Queensland Civil and Administrative Tribunal Act 2009
(Qld), s 20, s 24, s 61

Delahunty v QBSA [2013] QCAT 639
Doolan v Queensland Building and Construction
Commission [2017] QCAT 58
QBSA v D’Rozario, R and Anor [2003] QBT 12

APPEARANCES &
REPRESENTATION:

Applicant: D Favell instructed by Spire Law

Respondent: S Seefeld instructed by Holding Redlich

REASONS FOR DECISION

- [1] The applicant, Ms Lawless, complained to the Queensland Building and Construction Commission (QBCC) on 17 July 2015 that her dwelling at 43 Hannay Street, Moranbah suffers extensive cracking to external walls across the entry, garage at the front, and down the right side of the garage and severe and expanding cracks outside the laundry.
- [2] The applicant seeks orders that would enable defective building work and consequential damage to be rectified.¹ To that end she has sought a review of a decision of the respondent made on 13 January 2016.
- [3] The reviewable decision results from a senior internal review officer of the QBCC conducting an internal review in relation to an earlier decision made not to issue a licensee with a direction to rectify defective building work.

¹ *Queensland Building and Construction Commission Act 1991* (Qld), s 71H(1), s 72.

- [4] The reviewable decision gave the licensee an opportunity to rectify defective stormwater drainage pipes. It was found that the failure to install flexible fittings to the storm water pipe work at the property is category 1 defective building work for which the builder is responsible. It was found that the defects have resulted in damage to drainage pipes attached to the dwelling, allowing water to pond against the buildings footing system and does not comply with site drainage requirements of a Class P site with H shrink capacity of 40-70 mm. The Direction also required a plumbing test to all stormwater and sanitary pipework to confirm the pipework is sound, during the rectification process. In the event that rectification did not occur within the required timeframe, it was to be assessed as an insurance claim. That varied the original decision. As at the date of the hearing that work had not been performed.
- [5] Otherwise, the review notice concluded that movement which has occurred to the applicant's dwelling is within the acceptable tolerances of the Building Code of Australia (BCA) and AS2870; and further that the footing and slab systems are performing.
- [6] It was found that it is the review applicant's responsibility to ensure site levels comply with the BCA and AS2870 requirements by limiting moisture variances to the site to help improve the building's overall performance and to reduce any potential movement of the footing and slab system.
- [7] The applicant seeks a variation of the QBCC's decision of 13 January 2016 and the subsequent Direction to Rectify of 28 January 2016, to rectify defective building work by way of a Direction to:
- (a) ensure effective site drainage is provided to the building perimeter by ensuring the ground falls away from the building perimeter to avoid ponding near the building footprint. Construction of a concrete apron slab around the dwelling perimeter to reduce moisture variation and vertical movement by the slab and footing system;
 - (b) verify if any damage to existing in ground services has occurred and if plumbing pipes located in the proximity of the buildings have been constructed without flexible connection;
 - (c) all vertical control joints should extend to the full height of the wall. Joints should be provided at four metre maximum centres and as defined by AS4773.2;
 - (d) cracks to the brick veneer walls to be repaired. Wall cavity and internal studwork skin to be investigated for water or insect damage and repaired. Moisture affected plasterboard (internal) should be replaced; and
 - (e) cracks to internal linings and floor tiles to be repaired.

Background

- [8] The applicant entered into a contract with Ducon Pty Ltd for the construction of a new house on 6 January 2010. After construction of the house the company went into liquidation.
- [9] The house reached practical completion on 29 September 2010 and a Form 21 Final Inspection Certificate was issued for the property.

- [10] On 29 April 2011 the QBCC received a complaint from the applicant in relation to:
- (a) cracking in render, brickwork and footings;
 - (b) possible subsidence; and
 - (c) possible damage to structural components.
- [11] Following investigation, the QBCC determined that all items of cracking identified in the first complaint remained constant and no further subsidence had occurred. The QBCC found that Category 2 defective building work was present, and rectification was required to articulation joints in the external walls of the property. The applicant was eligible for assistance with the statutory insurance scheme with respect to rectification of the Category 2 defective building work. That work was completed by a third-party contractor on 20 April 2012.
- [12] On 17 July 2015 the QBCC received a second complaint in relation to cracking. That complaint was the subject of the internal review ultimately the subject of this review proceeding.² This Tribunal has jurisdiction to produce the correct and preferable decision.³
- [13] The applicant contends that there are two principal Category 1 defects arising from the following defective building work:
- (a) failure to install articulation joints on downpipes. The direction issued in January 2016 required that work to be undertaken; and
 - (b) failure to install vertical articulation joints in the brickwork from base to top.
- [14] It is argued that the 2016 direction was deficient in that it did not deal with the brickwork articulation nor did it deal with consequential damage of cracking to the house.
- [15] It is submitted that the Tribunal has power to make directions in relation to consequential damage.⁴
- [16] The applicant argues that consequential damage is defined as having been caused by building work, that building work does not have to be a major cause and a common-sense approach is to be taken in relation to the cause of consequential damage.
- [17] It is argued that if the requirement for articulation, downpipe articulation joints and vertical articulation joints had been picked up earlier, the consequential damage may not have occurred.
- [18] Section 71H of the *Queensland Building and Construction Commission Act 1991* (Qld) (QBCC Act) defines consequential damage as:
- (1) damage -

² *Queensland Building and Construction Commission Act 1991* (Qld), s 86(1)(e), s 87.

³ *Queensland Civil and Administrative Tribunal Act 2009* (Qld), s 20, s 24.

⁴ *Queensland Building and Construction Commission Act 1991* (Qld), s 72; *Delahunty v QBSA* [2013] QCAT 639.

(a) caused by, or as a consequence of, carrying out building work at a building site, regardless of any intention, negligence or recklessness of the person carrying out the work; and

(b) to a residential property at the relevant site...

(2) In this section –

building work includes any work prescribed by regulation.

damage, to a residential property, includes any of the following –

(a) the impairment of drainage at the property;

(b) the undermining of a ...structure along the boundary...

(c) ...compromising the structural integrity of a building, swimming pool or wall on the property

(d) the cracking, lifting or cratering of a driveway or pathway on the property;

(e) water penetration of the property;

(f) infestation of the property by termites...

[19] By s 72 of the QBCC Act, the QBCC may, if it considers consequential damage has been caused by or as a consequence of carrying out building work, direct the person who carried out the work to remedy the damage.

[20] It is uncontentionous that cracking of walls and concrete floors may be categorised in accordance with Appendix C to AS2870 of 1996.⁵ In relation to walls, the categories are:

- 0 – hairline cracks;
- 1 – fine cracks, less than 1mm, which do not need repair;
- 2 – cracks, less than 5mm, noticeable but easily filled;
- 3 – cracks, 5mm to 15mm or a number of cracks 3mm or more in one group, can be repaired and possible a small amount of wall will need to be replaced; and
- 4 – Extensive repair work involving breaking-out and replacing section of walls, especially over doors and windows. Window and door frames distort. Walls lean or bulge noticeably, some loss of bearing in beams. Service pipes disrupted. Cracks are 15mm to 25 mm but also depends on number of cracks.

[21] The parties agree that because of the timing of the construction and complaints in this matter either the 2004 or the 2010 QBCC Rectification of Building Work Policies apply. Under both policies a person who carries out defective building work whether through causing subsidence (footing or slab movement); or other defective work falling within categories 1 or 2, may be made the subject of a direction to rectify.

⁵ Attachment A to the Joint Expert Report dated 1 June 2017.

Both policies define relevant categories of defective building work in similar ways. The 2010 policy provides, in substance:

- Category 1 – defective building work is defective building work, other than work causing subsidence, that is faulty or unsatisfactory because it:
 - (i) adversely affects the structural performance of a building;
 - (ii) adversely affects the health or safety of persons residing in or occupying a building;
 - (iii) adversely affects the functional use of a building;
 - (iv) allows water penetration into a building.
- Category 2 defective building work means defective building work other than category 1 defective building work or residential construction work causing subsidence, that is faulty or unsatisfactory because:
 - (i) it does not meet a reasonable standard of construction or finish expected of a competent holder of a relevant license;
 - (ii) it has caused a settling in period defect.

[22] Both parties agree that the Policies are a relevant consideration.

[23] The QBCC submits that whether the footing and slab system is performing in accordance with AS2870 is a threshold question in deciding whether there has been defective building work resulting in subsidence which may be the subject of a direction to rectify.

Extension of Time

[24] Section 72A(4) of the QBCC Act provides that a direction to rectify or remedy cannot be given more than six years and three months after the building work to which the direction relates was completed or left in an incomplete state unless the Tribunal is satisfied on application by the QBCC that there is in the circumstances of a particular case sufficient reason for extending the time for giving the direction and extends the time accordingly. Upon the making of such an application the Tribunal has a broad discretion to grant the extension.⁶

[25] At the commencement of the hearing Counsel for the respondent made the requisite application.⁷

[26] The relevant time frame expired on 29 December 2016. The respondent submits that it would be unfair to the applicant if the extension is not granted. The applicant made the relevant complaint to the QBCC on 17 July 2015, some four years and nine months after the work was complete. The matter has then taken some two years to proceed through an original decision (2 September 2015), internal review of that decision (13 January 2016) and an application for external review (19 February 2016). The matter

⁶ *Queensland Civil and Administrative Tribunal Act 2009 (Qld)*, s 61.

⁷ See *Doolan v Queensland Building and Construction Commission* [2017] QCAT 58, [4]-[11].

was set down for hearing in December 2016 but adjourned by consent to enable further expert evidence to be obtained.

- [27] The applicant made her complaint within the 6 years and 3 month limit, but the matter has been delayed through no real fault of either of the parties. The QBCC submits that the objects of the QBCC Act would be promoted by allowing the extension of time.
- [28] The respondent noted that in this case the builder is in liquidation and the matter will proceed through the statutory insurance scheme. Counsel for the respondent confirmed that there is no impediment to the grant of an extension of time in the statutory insurance scheme.
- [29] Finally, the respondent submitted that if the Tribunal determined that a Direction to Rectify should issue, that would militate in favour of an extension of time.
- [30] The applicant submits that it is appropriate to extend time because:
- (a) this is not a case in which the applicant has been dilatory in bringing her complaints to the attention of the respondent and in filing her application with the Tribunal;
 - (b) both parties are legally represented and have expended significant costs with respect to lawyers and experts. It would be a harsh outcome for the applicant to have gone to such effort and expense only to have the matter thrown out on a technicality. and
 - (c) the applicant could not reasonably have been aware of the effect of s 72A(4) and the respondent failed to pick up on the problem until it was raised by the applicant.
- [31] For the reasons given by the parties, I consider there is sufficient reason to extend time for giving a Direction and I extend the time accordingly.⁸

The Issues

- [32] It is necessary to determine:
- (a) the cause of cracking to the dwelling;
 - (b) insofar as the footing and slab system may have deflected and caused cracking, whether the footing and slab system is performing in accordance with AS2870;
 - (c) whether the dwelling has sustained consequential damage as a result of defective building work, including as a result of:
 - (i) a lack of articulation joints in the external walls of the dwelling installed in accordance with AS4773;

⁸ See the discussion of relevant considerations for the Tribunal in *QBSA v D'Rozario* [2003] QBT 12, [18] – [19].

- (ii) a lack of articulation joints on downpipes which was not recognised as defective building work when the first complaint was made, but has been the subject of a direction to rectify some 7 years later;
- (d) whether the work performed by the builder was defective; and
- (e) whether it is reasonable to direct rectification when there may be other reasons for cracking besides defective building work.

Evidence

[33] I have considered the evidence of the parties. Evidence was given by the applicant and her expert, Mr Kenny,⁹ whose engineering practice Flanagan Consulting Group provided reports in relation to the matter. The respondent called evidence from its expert, Mr Wright and an inspector Mr Goodsall, and relied upon its statement of reasons, investigation reports, statements from its staff and relevant policies.¹⁰

Joint Conclave Report dated 29 June 2017

- [34] Mr Kenny and Mr Wright participated in a conclave and produced a joint report.¹¹
- [35] Neither Mr Kenny nor Mr Wright have visited the site. Mr Kenny relies on a report of an ex-employee of his business who had visited the site and reports prepared under his supervision.
- [36] Both experts agreed at the conclave that the slab construction is within the technical parameters and standards required at the time of construction.
- [37] They agree that the site is comprised of highly reactive soil.
- [38] At the time of the conclave, the experts were unable to give a definitive view in relation to site grading. They agreed that a fall towards the house would be contrary to AS2870-1996 (clause 5.2.1) and could result in adverse moisture conditions and exacerbate building movement.
- [39] The experts agreed that there is slab distortion which has caused cracks in the super structure of the brick house and internal plaster.
- [40] Without a site level survey, the experts were reliant on photographs and they reached differing conclusions as to what the photographs depict. Both agreed that a site level survey was necessary to form a concluded view.

⁹ Exhibit 1 Statement of Ms Lawless dated 12 May 2016; Exhibit 2 Statement of Liam Kenny dated 6 February 2017; Exhibit 4 Flanagan Report RDB0051C dated August 2016; Exhibit 5 Report RDB0092 dated August 2016.

¹⁰ Exhibit 7 Statement of Reasons dated 14 April 2016; Exhibit 8 Statement of Debbie White dated 14 September 2016; Exhibit 9 Rectification Policy 2004; Exhibit 10 Rectification Policy 2010; Exhibit 11 Statement of Stephen Ferguson dated 14 September 2017; Exhibit 12 Statement of Edward Goodsall dated 18 November 2016; Exhibit 13 Statement of Edward Goodsall dated 30 January 2017; Exhibit 14 Statement of Peter Wright dated 27 March 2017; Exhibit 15 Supplementary Statement of Peter Wright dated 19 October 2017.

¹¹ Exhibit 6 Joint expert report dated 29 June 2017.

- [41] However, they did agree that having regard to the cut of the site, it is likely the back-left hand corner of the land which falls toward the street near the al fresco area on the deepest part of the cut section is likely poorly drained.
- [42] The portion of the house from the laundry to the garage is positioned on the fill platform. Mr Kenny considers, based on photograph E attached to the joint report, that water flows along the block to the front of the site where the garage is located, and this affects both surface and ground water on the fill platform. Mr Wright disagrees and points to photograph I. There was some agreement that photographs appear to show the ground surface grades away from the right-hand side of the garage and that the block falls down towards the house with an invert, about one fence panel from the external wall of the house, which appears to extend over one metre or more from the house as required by AS2870-1996.
- [43] In relation to moisture content of the soil, it is noted that no soil testing has been done since before construction.
- [44] Mr Wright is of the opinion that further soil testing to obtain a moisture content profile on the left and right-hand side of the house to a depth of about 2.5 metres may be helpful. In his view the right-hand side of the slab of the house appears to be higher than the left-hand side according to the QBCC's floor level survey. He considers a moisture content profile may assist in determining his hypothesis that the moisture content may be affected by the vegetation onsite prior to construction. It was previously an undeveloped site on which there was native scrub.
- [45] Mr Kenny disagrees with the hypothesis.
- [46] The experts agree that the downpipe at the front of the garage has not been properly articulated and no flexible connections were installed. They agree that this has resulted in the failure of the downpipe and potentially elevated soil moisture conditions in the area.
- [47] The experts agree that inadequate grading of the site could result in stormwater being directed towards the building resulting in abnormal moisture conditions. They agree a broken downpipe can lead to abnormal moisture conditions. They agree that abnormal moisture conditions can have adverse effects on structures similar to what has been observed at the house.
- [48] The experts are unaware whether air conditioning discharge pipes are connected into the stormwater or whether they discharge into the ground. They do not know when the pipes were installed or by whom, but if they discharge into the ground they could result in abnormal moisture conditions.
- [49] In relation to slab movement the experts agree that the slope of the slab at the site is at the start of the undesirable range although it is not non-compliant with AS2870-1996.
- [50] The experts thought it desirable to have another floor level survey undertaken. They do not think the QBCC floor level survey was entirely accurate. They did not consider that their opinions would change as a result of the updated survey.
- [51] The experts agree that the floor slopes do not necessarily translate to building damage. They do not have evidence that suggests there are large cracks in slab.

- [52] In relation to the superstructure, the experts agree that provision of proper site drainage and maintenance of drainage is a requirement.
- [53] The experts note that remedial work has been undertaken at the premises and it may be adequate to prevent future cracking, provided the inserted joints were correctly formed (cut through the brick veneer and for the full height of the wall), spacing of the joints is adequate, work was performed in accordance with the relevant Australian Standard, deficiencies in site drainage are repaired and the non-flexible connections on downpipes were replaced with flexible connections.
- [54] The experts agree that installation of the omitted articulation will not directly repair or reduce the extent or severity of the existing damage. Mr Wright is of the view that if the apparent heave at the corner of the slab is the result of leakage from the downpipe then repair of the broken pipe will see a dissipation of subsoil moisture and subsidence of that corner of the slab and a reduction in cracking resulting from heave of that corner of the slab.
- [55] In relation to cracking the experts are agreed in relation to the relevant classification table, AS2870-1996, but disagree about the maximum width of cracks in the brick structure.
- [56] Mr Kenny considers that cracking on the northern side of the house is particularly problematic and may affect water tightness of the structure. He classifies the cracks as Category 3 – moderate.
- [57] Mr Wright considers that cracking on the northern side of the house is one crack only, not a series. He considers that there is no crack of 5mm width as contended by Mr Kenny, but that mortar has fallen out of the crack. He considers the maximum width of the cracks is 3mm with only one crack of more than 3mm appearing in the photographs. He considers the correct classification is Category 2 only. He is not concerned about water penetration as an issue.
- [58] Elsewhere on the brickwork, the experts disagree. Mr Kenny suggests there are numerous other Category 2 areas which require remedial work. Mr Wright puts the rest, other than one, into Categories of 0 or 1 not requiring repair although he concedes the homeowner may wish to have those cracks repaired for aesthetic reasons, it is not necessary for the performance of the building.
- [59] The experts agree that plaster damage falls into Category 1 – very slight, however, the homeowner may wish to repair the damage for aesthetic reasons.

Supplementary Report of Mr Wright

- [60] A further report was filed 19 October 2017 by Mr Wright.
- [61] The report refers to survey work carried out on the site by AA Surveys Pty Ltd.
- [62] The purpose of the site level survey was to address the issue of whether the ground surface level around the building complied with the requirements of AS2870-1996.
- [63] Unfortunately, Mr Wright is unable to report that the AA Surveys plan provides sufficient information in order to make an assessment as to whether the ground in the

immediate vicinity of the perimeter footing is graded to 450mm minimum away from the footing over a distance of one metre as required by the Australian Standard.

- [64] The AA Surveys plan does suggest there may be a slight depression, less than 10mm deep, near the back-right hand corner of the dwelling. It also suggests there may be a depression at the rear left-hand corner of the tank slab.
- [65] The AA Surveys plan suggests by blue contours that the ground surface falls away from the front right-hand corner of the slab, the area of the slab where the survey shows the slab is the highest.

Slab and Footing system design

- [66] I accept the evidence of both experts that the slab and footing system is within technical parameters and standards required at the time of construction.¹²
- [67] I find that the slab and footing system designed for the property was in accordance with the requirements of AS2870-1996.
- [68] I accept the submissions of the QBCC that there is no evidence to suggest that the builder did not construct the slab and footing system in accordance with the required design.¹³
- [69] I am satisfied that the slab and footing system at the property has been constructed in accordance with the design and accordingly in compliance with the requirements of the Standard.
- [70] In these circumstances I find there has been no defective building work by the builder in relation to the construction of the slab and footing system at the property.

Performance of the Footing and Slab system

- [71] I accept the evidence of the experts that there has been distortion to the footing system at the property and this has caused damage to the superstructure of the building through cracking in the walls.
- [72] The experts disagree as to whether distortion to the footing system indicates that the building is performing within the tolerances set out in AS2870-1996.
- [73] I accept that AS2870 recognises that minor cracking and movement will occur in a significant proportion of houses, particularly those on reactive clays. The Standard notes that significant damage can be avoided if foundation site conditions are maintained and not subject to abnormal moisture conditions.
- [74] I find that consistent with the assessment of both experts, internal damage does not amount to non-performance of the footing system. I accept the submission of the

¹² Exhibit 14 First Wright report at pages 3,11 and 16; Exhibit 6 Conclave Report at [7].

¹³ Form 16 inspection certificate – second Goodsall statement at page 107 to 109 – Exhibit 13 in the proceedings.

QBCC that this accords with AS2870 that “some minor cracking and movement will occur in a significant proportion of houses, particularly those on reactive clays”.¹⁴

- [75] In relation to the external walls, I prefer the evidence of Mr Wright that all but two of the cracks to the external walls of the property are Category 1 cracks. The remaining two are Category 2.¹⁵ I accept the submissions of the QBCC that Mr Wright has carried out an individual assessment of each of the listed defects against the damage classification in Appendix C of AS2870. The assessment appears at Appendix A of his report. Mr Kenny has not carried out such an individual assessment.
- [76] I accept Mr Wright’s evidence given at the hearing that two cracks in the external wall falling within Category 2 are of the occasional or rare nature contemplated by a footing system which is performing in accordance with AS2870.
- [77] One long horizontal crack outside the laundry door on the northern side of the building is of particular concern. Part of the crack appears to be wider than others. Mr Kenny’s evidence is that the crack is up to 5mm in width at its maximum. The QBCC submits if that was so it would be categorized at the bottom end of damage – Category 3. Mr Wright does not agree that the crack on the northern side of the building is 5mm wide at its maximum. Rather his analysis is that the area of the claimed 5mm crack is in fact an area where a piece of the render mortar has fallen out. Upon viewing the photographs¹⁶ it does appear to me to depict a gap where a piece of render has fallen out. I find that consistent with the evidence of Mr Wright, the crack adjacent to the laundry door is a maximum of 2mm to 3mm wide and is damage Category 2.
- [78] In relation to cracking of the concrete floors, I accept the evidence of Mr Wright that one crack is a Category 2 with the remainder as Category 1, being less than 1mm.¹⁷ I note the Flanagan supplementary report notes cracks on the concrete floor are due to concrete shrinkage.¹⁸
- [79] I accept the submission of the QBCC that AS2870 provides: “Shrinkage cracking can be expected in concrete floors”.¹⁹
- [80] In relation to assessment of floor slope, I accept and find in accordance with the evidence of the experts that while the slope of the floor is at the start of the undesirable range, it is not non-compliant with AS2870.²⁰
- [81] On the basis of these matters, I find that the slab and footing system is performing in accordance with AS2870 and that there is therefore no defective building work which has caused subsidence or slab movement.

Site Drainage

¹⁴ AS2870 at B1 (page 57).

¹⁵ Flanagan Report 4585 August 2016 attached to Exhibit 3 noting defects 16,17 and 18 (being one long crack) and defect 28.

¹⁶ Flanagan April report attached to Exhibit 3, Appendix B at page 17 of 16. See also photo O annexed to the conclave report.

¹⁷ First Wright report, Exhibit 14 at 5.5.2 and Appendix A, page 18.

¹⁸ Flanagan supplementary report at pages 6 and 7 of 29.

¹⁹ AS2870 at para B4 (page 59).

²⁰ Conclave report (Exhibit 6) at [33]. See also first Wright report (Exhibit 14) at para 5.5.1 (page 12).

- [82] The evidence in relation to whether the ground falls away from the building in accordance with the BCA and AS2870 or whether the ground falls towards the house is unsatisfactory. Photographs appear to show water ponding against the base of the building.²¹ Mr Wright gave evidence at the hearing that heaving of the substructure caused the cracking but he could not say what had caused the heaving. He thought soil moisture may have been affected by tree roots from the pre-cleared site. He also thought vegetation on the site was causing moisture problems. Mr Wright said that a site changes over time and that it is the responsibility of the home owner to ensure soil is not overly wet or dry as part of ongoing maintenance. He agreed, by reference to photographs that drainage at the site is not adequate.²²
- [83] The QBCC submits that there is evidence that the builder constructed the drainage at the site in accordance with the relevant Standard.
- [84] The Form 21 Inspection Certificate dated 29 September 2010 indicating ground slope from building and floor height above ground is satisfactory. It is noted that the Isaac Regional Council specifically required ground slope to be addressed and a reinspection undertaken before issuing a final approval. I am asked to draw an inference that the builder attended to ground slope and that it was compliant.
- [85] In the absence of other compelling evidence, I rely on the Form 21 Certificate as evidence of compliance with AS2870. The applicant conceded at the hearing that she did not view the site drainage at the time the building was completed nor was she present when the council certifier was carrying out his inspection. The applicant also agreed in evidence that site drainage was rectified until 2015.
- [86] Relying upon the Form 21 Final Certificate, I find that the ground slope at the time of completion of the building was compliant with the BCA and AS2870.
- [87] In relation to photographic evidence of ponding at the front corner on the northern side of the building, I accept the QBCC's submission that the photograph was taken some months after the builder completed his work.
- [88] In relation to possible explanations for problems with site drainage, it is suggested by the QBCC that subsequent events may have affected site drainage for reasons outside the builder's control. These events are:
- (a) landscaping undertaken by Grass Tree Landscaping, as work outside the contract with the builder. Landscaping included turf, planting of a garden and construction of a retaining wall. Shrubs were planted at the front of the house.
 - (b) following a complaint by the applicant to the Isaac Regional Council about drainage issues, the Council noted on 25 January 2011 that:
 - (i) there had been "torrential type downpour".
 - (ii) turf had "settled low" causing water to pond and not run off.
 - (iii) reshaping of the ground surface was required;

²¹ Statement of Reasons (Exhibit 7, page 34).

²² Ibid.

- (iv) Grass Tree Landscaping had offered to carry out rectification works;
- (c) by letter dated 18 February 2011, the Isaac Regional Council advised rectification work other than turfing had been completed; and
- (d) the applicant advised the builder on 30 March 2011 that with the help Dylan Hamilton and Grass Tree Landscaping, the drainage problems have now been rectified.²³

[89] I accept the QBCC's submission that the applicant bears the onus of establishing that the builder was responsible for defective work and in particular site drainage as a result of grading of the site which does not comply with the BCA and the relevant Australian Standard.

[90] I accept the submission of the QBCC that subsequent landscaping and heavy rainfall is more likely to have impacted on the site than works within the control of the builder.

[91] The QBCC submits that in accordance with AS2870, the home owner is responsible for maintenance and that moisture conditions within the control of the home owner may affect the footing system.

[92] The applicant's evidence was that she has carried out no works to maintain the site drainage at the property.²⁴

[93] At the hearing Mr Kenny gave evidence that abnormal moisture conditions can be caused by trees against a building. He agreed that it was not possible to disaggregate between the effect of the trees or shrubs near the dwelling and the damaged downpipe or site grading. Mr Kenny agreed that trees will exacerbate moisture problems.

[94] On the basis of these matters, I find that the builder has not carried out defective building work in relation to site drainage at the property.

Plumbing to the Site, Including Stormwater Drains

[95] The QBCC has identified a failure by the builder to include flexible connections to the stormwater pipes. The QBCC has issued a request to rectify to the builder to carry out these works.

[96] An inspection of the stormwater and sewage pipework at the property was undertaken by a plumber engaged by Mr Ferguson.²⁵

[97] Mr Ferguson identified one stormwater downpipe had cracked. As a result of Mr Ferguson's enquiries, it was found that there are no breaks to the stormwater pipework or sewer drainage under the slab, there has not been movement to the downpipes at the base of the residence at the property due to the lack of flexible fittings to the stormwater pipework and the drainage installed by the builder at the

²³ Lawless response (Exhibit 1) at attached document 17.

²⁴ Lawless response (Exhibit 1) at attached document 30; para 11 (page 8) of the statement of Amanda Lawless filed 12 May 2016.

²⁵ Ferguson statement (Exhibit 11) at [20]. See plumbing report dated 7 June 2016 at pages 13 to 16.

property complies with the requirements of AS2870-1996 except for the lack of flexible fittings to the stormwater pipework.²⁶

- [98] The plumbing report does however note that the downpipe near the front door and the downpipe near the right-hand side in the middle of the house are broken at ground level.²⁷
- [99] The QBCC raises the question of the extent to which the cracks in the downpipes (as a result of the lack of flexible connections) has caused differential movement to the footing system and consequent cracking to the walls of the building.
- [100] The evidence is unsatisfactory. It is not possible to say with any certainty when cracks in the downpipes appeared or the extent to which they have contributed to movement in the footing system.
- [101] The conclave report says that the “potentially elevated soil moisture conditions” in the area may have an adverse effect on the structure. However, the experts are unable to say with any certainty the impact of this problem compared with other issues such as inadequate site drainage or air conditioning discharge pipes.²⁸
- [102] I am not able on the evidence before me to conclude that cracks in the downpipes have contributed to the footing system movement.

Wall Masonry Articulation

- [103] The QBCC identified following the applicant’s complaint in 2011 that there was cracking to the membrane and one masonry articulation joint which did not extend to the foundation. The scope of work for rectification of vertical control joints, also referred to as masonry articulation joints, to be carried under the statutory insurance scheme, was issued in January 2012.
- [104] The conclave report records that the articulation joints, may be adequate to prevent future cracking provided they have been installed in accordance with AS4773.
- [105] The QBCC accepts that the original problem with the masonry articulation joints was defective building work by the builder. That was accepted and addressed by issue of the scope of work in 2012.
- [106] The applicant submits that appropriate masonry articulation is not present today.
- [107] The QBCC in its submissions says that the difficulty for the Tribunal is that no assessment by either expert has been carried out against the relevant Standard, AS4773, in relation to the positioning of the articulation joints in the building by the builder; and the effect of this on the cracking to the external walls of the house. It is conceded that the installation of a masonry articulation joint above the glass door might have alleviated the “big crack”,²⁹ however, this says nothing about whether the

²⁶ Ferguson statement (Exhibit 11) at [20].

²⁷ Ferguson statement (Exhibit 11). Attached plumbing report on page 14.

²⁸ Conclave report (Exhibit 6) at [25] to [29].

²⁹ Flanagan report 4585 August 2016 defects 16,17 and 18.

masonry articulation joints actually installed were positioned in accordance with AS4773.

- [108] Mr Kenny's evidence, based on photographs taken at the site, is that articulation joints have been inserted more than 4 metres apart in contravention of the relevant standard. His report also records that one of the joints near the South-West corner is not full height and is not in accordance with AS4773.2.³⁰ Mr Kenny agreed that the remedial work already done may be adequate to prevent future cracking, but that it does not assist existing cracks.
- [109] Mr Goodsall, a QBCC Manager based at Rockhampton, reviewed the QBCC file and inspected the property on 16 November 2016. He gave evidence in cross-examination that there is a chance the vertical control joints are not full length. He thought that only minimally affected their performance as articulation joints. He did not agree that more and bigger cracks would occur.
- [110] During cross-examination Mr Wright said that because he had made no site visit, he could not say if the vertical control joints in the house were at the correct width apart. Mr Wright gave evidence that rectification of the big crack would involve cutting a full penetration articulation joint above the sliding glass door. He said that if the crack was more than 5mm it should not be patched. However, he also said that if the crack is static, then consideration could be given to filling it.
- [111] Mr Wright agreed with the proposition put by Counsel for the applicant that absence of an articulation joint contributed to the crack.
- [112] Mr Wright gave evidence in cross-examination that there is no one single cause for a cracking problem. However, he said that there should have been articulation joints in the building from the get-go. He said it was the builder's fault and that it was more of a factor in the big crack than vegetation.
- [113] Mr Wright also agreed that an articulation joint would have balanced out the effect of any leaking downpipe.
- [114] However, despite concessions made in cross-examination, Mr Wright concluded his evidence by saying that he did not think there was anything the applicant could validly complain about, including the big crack which he said was a Category 2 problem and that in his view nothing breaches AS2870.
- [115] During re-examination Mr Wright was asked what the remediation for the big crack might be. He said the remediation would be one articulation joint above the window openings on the side of the house and to fill the crack. In relation to site drainage, it should comply with the 50mm fall away from the house and drain to the street. He said that vegetation must comply with the CSIRO recommendations which would involve taking shrubs out from the front of the house.
- [116] Mr Wright said that because he had made no site visit, he could not say if articulation joints in the house were at the correct width apart.

³⁰ Exhibit 13 at paragraph 18(b).

- [117] The QBCC submits that there is an insufficient basis upon which the Tribunal could direct rectification in relation to the masonry articulation joints.
- [118] The QBCC submits that if it is the case that the big crack is not a Category 3 crack, there is no defective building work which could require remediation by the builder, even though such remediation may be a useful and attractive resolution from the applicant's point of view.
- [119] I accept the evidence of both experts that correctly installed vertical control joints should have formed part of the original building work and that lack of those joints contributed to cracking in the exterior of the dwelling. I accept the evidence of Mr Kenny that the vertical control joints are not installed in accordance with AS4773. I prefer Mr Kenny's evidence as he has specifically turned his mind to the issue and found evidence to support his opinion, unlike Mr Goodsall or Mr Wright.
- [120] I accept the evidence of Mr Wright that the big crack is not a Category 3 crack. However, I find that failure to install full height vertical control joints in accordance with AS4773 and to install a vertical control joint over the sliding glass door is defective building work that is faulty or unsatisfactory because it has resulted in a standard of construction and finish (in terms of cracking) which does not meet a reasonable standard expected of a competent holder of a contractor's licence of the relevant class. That is, I find that defective building work has resulted in category 2 damage within the terms of the 2004 and 2010 Rectification of Building Work Policy.

Conclusions

- [121] On the basis of the evidence and findings set out in this decision, I find that:
- (a) a cause of cracking in the dwelling is slab distortion;
 - (b) a further cause of cracking is the lack of vertical control joints in the brick veneer installed in accordance with AS4773, for the full height of the wall and spaced as required by the Standard; and
 - (c) a contributing cause of the largest crack is the absence of a full penetration articulation joint above the sliding glass door.
- [122] I find that slab distortion was caused by moisture. I find that drainage at the site is poor. Beyond that I am unable on the evidence to find the source of abnormal moisture which has caused slab distortion, nor whether poor drainage or any other source of abnormal moisture was the result of defective building work by the builder.
- [123] I find that despite the slab distortion, the footing and slab system is properly designed and is performing within the tolerances set out in AS2870. I find that a certain amount of slab movement and cracking is acceptable under the Standard.
- [124] I find that:
- (a) internal damage and cracking to concrete floors is category 1 damage in accordance with Appendix C to AS2870 of 1996;
 - (b) cracks to the external walls are category 1 damage, except for two category 2 cracks in accordance with Appendix C to AS2870 of 1996;

On this basis, I find that the slab and footing system is performing in accordance with AS2870 and that there is no defective building work which has caused subsidence or slab movement.

- [125] As to whether the dwelling has sustained consequential damage as a result of defective building work, I find that the failure to insert full height articulation joints in the brick veneer and to install articulation joints on downpipes is defective building work. However, given the definition of consequential damage in s 71H of the QBCC Act, I am unable to find on the evidence that this defective building work has impaired drainage, undermined a boundary structure, compromised the structural integrity of the building or a wall, cracked, lifted or cratered a driveway, or enabled water penetration or infestation by termites. Accordingly, I find that the dwelling has not sustained consequential damage as a result of defective building work.
- [126] I find that the two category 2 cracks as identified by Mr Wright are category 2 defects under the 2004 and 2010 Rectification of Building Work policies resulting from the builder's failure to install full height articulation joints in accordance with AS4773.
- [127] On the basis of this finding, I further find that the applicant is entitled to rectification of the defective building work and the category 2 cracks, pursuant to the 2004 and 2010 QBCC Rectification of Building Work Policies
- [128] The difficulty is that there has been some rectification work undertaken by the retro-fitting of articulation joints. I do not consider it reasonable to direct the original builder to interfere with another builder's work.
- [129] However, I consider it fair that the builder be directed to repair the two category two cracks in the exterior of the dwelling as they are directly related to his failure to install appropriate articulation joints in the first place. I also consider it fair that the builder be directed to repair or replace the broken downpipes and to install articulation joints as previously directed by the QBCC. Taking into account that the builder Ducon Pty Ltd is in liquidation, work directed to be performed by that builder is likely to be performed pursuant to the statutory insurance scheme.
- [130] I find that other remediation work which the applicant may prefer to be done at the dwelling, in terms of the other cracks and effective site drainage are matters of maintenance for which the applicant is responsible.
- [131] I think the correct and preferable decision is that:
- (a) the QBCC direct rectification of the vertical control joints to comply with AS4773, by either the builder who performed retro-fitting work or such other licensed contractor as the QBCC may choose in accordance with s71A of the QBCC Act;
 - (b) Ducon Pty Ltd be directed to repair the two category 2 cracks to the exterior of the dwelling or that work be performed under the statutory insurance scheme;
 - (c) Ducon Pty Ltd be directed to repair or replace broken downpipes ensuring articulation joints on the downpipes consistent with the direction by the QBCC in its direction dated 13 January 2016. Alternatively, that work be performed under the statutory insurance scheme.

Orders

[132] I make the following orders:

1. The decision of the respondent Queensland Building and Construction Commission made 13 January 2016 is confirmed in relation to its direction to the builder Ducon Pty Ltd to rectify damaged stormwater drainage pipes and to install flexible fittings. The decision is otherwise amended as set out in the following orders.
2. The Queensland Building and Construction Commission direct rectification of vertical control joints to comply with AS4773, such direction to be made to the licensed contractor who retro-fitted vertical control joints or to such other licensed contractor as the QBCC may choose in accordance with s71A of the *Queensland Building and Construction Commission Act 1991* (Qld).
3. The Queensland Building and Construction Commission direct Ducon Pty Ltd to repair two category 2 cracks noted in the Flanagan Report 4585, dated August 2016 as:
 - a. defects 16,17 and 18, being one long crack; and
 - b. defect 28.

Alternatively, the work be performed under the statutory insurance scheme.

All repair work to match existing wall texture and repainting to match existing colour.