

QUEENSLAND CIVIL AND ADMINISTRATIVE TRIBUNAL

CITATION: *Mark Richard Formosa v Queensland Building and
Construction Commission* [2020] QCAT 93

PARTIES: **MARK RICHARD FORMOSA**
(applicant)

v

**QUEENSLAND BUILDING AND CONSTRUCTION
COMMISSION**
(respondent)

APPLICATION NO/S: GAR174-16

MATTER TYPE: Building matters

DELIVERED ON: 31 March 2020

HEARING DATE: 2 and 3 December 2019

HEARD AT: Mackay

DECISION OF: Member Garner

- ORDERS:
1. **Mr Mark Richard Formosa ('Mr Formosa') is allowed an extension of time until 21 February 2016 to make an insurance claim under the Queensland Building and Construction Commission Insurance Policy Conditions in respect of the following defective works:**
 - (a) **The pump out tank vent of the AES Enviro-Cycle Home Sewage Treatment Plant ('HSTP') at Lot 1, 27 Brookfield Drive, Sarina Beach, Queensland is located below ground-level;**
 - (b) **The nature and qualities of the soil in which the HSTPs at Lots 1 and 2, 27 Brookfield Drive, Sarina Beach, Queensland were installed is incompatible with the efficient and proper operation of the HSTPs; and**
 - (c) **Stormwater drainage and diversion at Lots 1 and 2, 27 Brookfield Drive, Sarina Beach, Queensland is inadequate for the efficient operation of the HSTPs on those Lots.**
 2. **The QBCC's decision made on 2 August 2017 to decline Mr Formosa's insurance claim under the Insurance Policy Conditions is set aside and**

substituted with the decision that:

Mr Formosa's insurance claim under the Insurance Policy Conditions is accepted in respect of the following defective works:

- (a) The pump out tank vent of the AES Enviro-Cycle Home Sewage Treatment Plant ('HSTP') at Lot 1, 27 Brookfield Drive, Sarina Beach, Queensland is located below ground-level;**
- (b) The nature and qualities of the soil in which the HSTPs at Lots 1 and 2, 27 Brookfield Drive, Sarina Beach, Queensland were installed is incompatible with the efficient and proper operation of the HSTPs; and**
- (c) Stormwater drainage and diversion at Lots 1 and 2, 27 Brookfield Drive, Sarina Beach, Queensland is inadequate for the efficient operation of the HSTPs on those Lots.**

3. If either party wishes to seek costs:

- (a) The party seeking costs is to file in the Tribunal and give to the other party a clear description of the costs and orders sought, and submissions in support, by 4pm on 17 April 2020;**
- (b) The other party is to file in the Tribunal and give to the other party submissions in reply by 4pm on 1 May 2020; and**
- (c) The issue of costs will be determined on the papers not before 2 May 2020.**

CATCHWORDS:

ADMINISTRATIVE LAW – ADMINISTRATIVE TRIBUNALS – QUEENSLAND CIVIL AND ADMINISTRATIVE TRIBUNAL – where decision made to decline a claim under the QBCC Home Warranty Insurance Scheme Policy Conditions – whether defective building work – whether extension of time to make insurance claim should be granted

Queensland Building and Construction Commission Act 1991 (Qld), s 89(2), s 86(1)(h), s 87

Queensland Civil and Administrative Tribunal Act 2009 (Qld), s 9, s 21, s 24(1)

Queensland Building and Construction Regulation 2003 (Qld), Schedule 1, Schedule 2

Glen Williams Pty Ltd v Queensland Building Services Authority [2012] QCAT 127

**APPEARANCES &
REPRESENTATION:**

Applicant: S B Whitten, instructed by Kelly Legal
Respondent: C Hill, In-House Solicitor for Queensland Building and Construction Commission

REASONS FOR DECISION

Introduction

- [1] On 30 April 2012, Mr Mark Richard Formosa and River City Homes (Mackay) Pty Ltd ('the Contractor') entered into a contract for the construction of a residential detached duplex units building ('the Works') at Lots 1 and 2, 27 Brookfield Drive, Sarina Beach, Queensland ('the Property').
- [2] The Works commenced on 20 August 2012 and reached practical completion on 14 May 2013.
- [3] In completing the Works, the Contractor installed a separate AES Enviro-Cycle Home Sewage Treatment Plant ('HSTP') for each of the duplex units. Each HSTP comprised pipes from the sanitary system inside the duplex unit to a 3,000 litre septic tank located underground at the rear of the unit, with a float valve operated pumped which pumps untreated water/effluent into an underground disposal area being an array of soakage trenches installed in the rear yard of the Property. Each HSTP was installed almost entirely underground with only the tops of vents normally visible above ground.
- [4] The HSTPs were designed by Water Wise Design Pty Ltd ('Water Wise') and physically installed by a sub-contractor Mackay Plumbing and Drainage (now trading as Laser Plumbing) ('the Sub-Contractor') engaged by the Contractor.
- [5] Mr Formosa alleges that when it rains both of the HSTPs do not operate properly. In particular:
- (a) internal plumbing (such as sink drains and toilets) backs up and does not work;
 - (b) effluent and water pools in the rear yard of the Property; and
 - (c) the HSTP high water alarm sounds ('the Operation Problems'),
- ('the Operation Problems').
- [6] Mr Formosa alleges that the Operation Problems are caused by the Contractor's work being defective.
- [7] On 21 February 2016, Mr Formosa lodged a complaint ('Complaint') with the QBCC which alleged defective building work by the Contractor in relation to the HSTPs.
- [8] On 7 March 2016, Mr John Cherry, QBCC Building Inspector, decided that there was no evidence of defective building work and accordingly the QBCC would not issue a direction to rectify to the Contractor.

- [9] On 9 March 2016, Mr Formosa applied to the QBCC for internal review of Mr Cherry's decision of 7 March 2016.
- [10] On 13 June 2016, Mr Stephen Ferguson, QBCC Senior Technical Internal Review Officer, completed a desktop review of the internal review application.
- [11] On 16 June 2016, Ms Debbie White, QBCC Senior Internal Review Officer, confirmed the decision of Mr Cherry and decided that QBCC would not issue a direction to rectify to the Contractor.
- [12] On 13 July 2016, Mr Formosa applied to the Tribunal to review Ms White's decision of 16 June 2016.
- [13] On 2 August 2017, Ms Kacey Zarb, QBCC Assessment Officer, decided to decline an insurance claim made by Mr Formosa under the QBCC's Home Warranty Insurance Policy Conditions ('the Insurance Policy Conditions') in respect of the alleged defective building work.
- [14] On 3 August 2017, Acting Senior Member Howe of the Tribunal directed that the Tribunal review proceed on the basis that the decision being reviewed is the decision of Ms Zarb of 2 August 2017.
- [15] Accordingly, this is a review of the QBCC's decision made by Ms Kacey Zarb on 2 August 2017 to decline Mr Formosa's insurance claim under the Insurance Policy Conditions in respect of the alleged defective building work.

Jurisdiction of the Tribunal to review the decision

- [16] There is no dispute between the parties, and I am satisfied on the evidence, that the Tribunal has jurisdiction to hear and determine the dispute pursuant to section 9 of the *Queensland Civil and Administrative Tribunal Act 2009* (Qld) ('QCAT Act') and sections 86(1)(h) and 87 of the *Queensland Building and Construction Commission Act 1991* (Qld) ('QBCC Act') in force at the date of the decision, being 2 August 2017.
- [17] Section 20 of the QCAT Act provides that the purpose of the review is to produce the correct and preferable decision. The Tribunal is required to hear and decide the review by way of a fresh hearing on the merits.
- [18] Section 24(1) of the QCAT Act provides that the orders that can be made by the Tribunal upon review are:
- (a) Confirm or amend the decision; or
 - (b) Set aside the decision and substitute its own decision; or
 - (c) Set aside the decision and return the matter to QBCC to reconsider the decision, with directions the Tribunal considers appropriate.

Statutory insurance scheme

[19] There is no dispute between the parties, and I am satisfied on the evidence, that a statutory policy of insurance was in force in respect of the Works from 30 April 2012¹ pursuant to section 69(2) of the QBCC Act (in force as at 1 January 2011).²

[20] Pursuant to Part 5 of the QBCC Act, the Insurance Policy Conditions in effect were the *Insurance Policy Conditions Edition 8* effective from 1 July 2009.

[21] Part 4.1 of the Insurance Policy Conditions states:

4.1 Payment for Defective Construction

Subject to the terms of this policy, the QBCC agrees to pay the cost of rectifying defects in the *residential construction work* that is *primary building work*, other than for defects from subsidence or settlement referred to in Part 5 of this policy.

[22] Part 4.5 of the Insurance Policy Conditions states:

4.5 Time Limit for Making a Claim

The *Insured* is NOT ENTITLED to payment for loss under this Part unless:

(a) In the case of a *category 1 defect*, the claim is made within **3 months** of that defect first becoming evident (in the opinion of the *QBCC*); or

(b) In the case of a *category 2 defect*, the claim is made within **7 months** of the date of *practical completion*,

or within such further time as the *QBCC* may allow.

[23] ‘Defective’ is defined in Schedule 2 of the QBCC Act to mean ‘in relation to building work, includes faulty or unsatisfactory’.

[24] The *Rectification of Building Work Policy* (‘Defects Policy’)³ which commenced operation on 1 July 2010 relevantly states:

(5) Definitions

In this policy...

Category 1 defective building work means defective building work (other than residential construction work causing subsidence) that is faulty or unsatisfactory because it does one or more of the following:

¹ The date when Mr Formosa as a ‘consumer’ (defined by Schedule 2 of the QBCC Act), entered into a contract with RCH as a ‘contractor’ to perform ‘residential construction work’ (as set out in Part 2, Division 2 of the *Queensland Building and Construction QBCC Regulation 2003* (Qld) (‘QBCC Regulation’), current as at 1 January 2012) in respect of the Works.

² In relation to the statutory insurance scheme, the applicable legislation is the legislative provisions in force when the policy of insurance was entered into by Mr Formosa on 30 April 2012: the QBCC Act current as at 1 January 2011 and the QBCC Regulation current as at 1 January 2012.

³ Pursuant to sections 7 and 9 of the *Statutory Instruments Act 1992* (Qld), the Rectification of Building Work Policy (‘Defects Policy’) which commenced operation on 1 July 2010 is a statutory instrument that is subordinate legislation.

- (a) ...
- (b) Adversely affects the health or safety of persons residing in or occupying a building;
- (c) Adversely affects the functional use of a building;
- (d) Allows water penetration into a building.

Defective building work means building work that is faulty or unsatisfactory, and includes, for example, work that:

- (a) Does not comply with the *Building Act 1975*, *Building Code of Australia* or an applicable Australian Standard
- (b) Involves the use of a manufactured product, and that product has been used, constructed or installed in a way that does not comply with the product manufacturer's instructions.

[25] Accordingly, Parts 4.1 and 4.5 of the Insurance Policy Conditions effectively requires the QBCC to pay the cost of rectifying defects if:

- (a) There is 'defective' building work;
- (b) In 'residential construction work' that is 'primary building work';
- (c) That is not from subsidence or settlement referred to in Part 5 of the Insurance Policy Conditions; and
- (d) A claim for payment was made:
 - (i) In the case of a 'category 1 defect', within 3 months of the defect first becoming evident;
 - (ii) In the case of a 'category 2 defect', within 7 months of practical completion; or
 - (iii) Within such further time as the QBCC allows.

Issues for determination

[26] It is not in dispute, and I am satisfied on the evidence, that:

- (a) The Contractor installed the HSTPs as part of the Works;
- (b) The Works is 'residential construction work' that is 'primary building work'; and
- (c) If the Works are 'defective':
 - (i) The defect/s would be appropriately classified as 'category 1' defect/s under clause 5 of the Defects Policy; and
 - (ii) the defect/s are not from subsidence or settlement referred to in Part 5 of the Insurance Policy Conditions.

[27] The Respondent asserts that Mr Formosa's insurance claim should be rejected because:

- (a) the Works is not 'defective'; and
- (b) Mr Formosa did not comply with the requirements of section Part 4.5 of the Insurance Policy Conditions to make the claim for insurance within 3 months of the defect/s becoming evident (on the basis it is a category 1 defect under the Defects Policy, clause 5).

[28] Accordingly, in deciding this review, the critical issues to be determined are:

- (a) Are the Works defective?
- (b) Did Mr Formosa comply with the requirements of section Part 4.5 of the Insurance Policy Conditions and Item (3) of the Defects Policy to make the claim for insurance within 3 months (on the basis it is a category 1 defect) and, if not, should the Tribunal allow him an extension of time to make the claim for insurance under Part 4.5 of the Insurance Policy Conditions?

Are the Works defective?

[29] In determining whether the Works are defective, I have considered a number of issues which are set out below.

What, if any, Operation Problems occurred?

[30] Mr Formosa said that when it rains, the Operation Problems occur in respect of both of the HSTPs. He said that the HSTPs soakage trenches in the rear yard immediately become waterlogged and the pumps cannot overcome the pressure of the ground water, so cannot expel the water from the septic tanks. To compound the problem, there is the possibility of back flow from the rear yard into the systems, which immediately renders the system unworkable. Effluent and water pools in the rear yard of the Property. Internal plumbing backs up and does not work to the extent that it may take a couple of hours to empty a sink and the toilet cannot be used during that time. The HSTPs' high water alarm sounds. Any level of moderate rainfall renders the plumbing ineffective. Prolonged rainfall is not required for the Operation Problems to occur.⁴ After the rain stops, the operation of the HSTPs slowly improves but may take 24 hours to return to normal drainage.⁵

[31] Mr Formosa said that the Operation Problems include most, if not all, of the problems identified by the HSTP User Manual that require an owner to contact the HSTP 'contractor': 'abnormally wet soil, presence of persistent puddles or odours in the area of the septic tank or the Enviro-Septic system', 'slow flushing toilets or other plumbing in the home', 'flooding in the area where the Enviro-Septic system is installed' and 'alarm from the pumping station if such a device is part of your installation'.⁶

⁴ Applicant's affidavit dated 4 May 2017, [16].

⁵ Applicant's affidavit dated 4 May 2017, [5], [10].

⁶ HSTP User Manual, Applicant's affidavit dated 4 May 2017, Annexure 2, page 5.

- [32] Mr Formosa said that the Operation Problems pose a significant health risk as large amounts of sewage water pooling in the yard is a potential breeding ground for mosquitos. Further, tenants of the Property are exposed to sewage water which results in constant bad odours and could result in sickness or disease.⁷ In addition, the Operation Problems have significantly diminished prospects of sale and continued tenancy and the sale value and rental value of the Property;⁸
- [33] Mr Ken Weir has over 50 years' experience as a qualified plumber which includes working with on-site waste disposal systems. He inspected the Property on an unknown date and prepared a report dated 11 January 2017 ('the Weir Report'). He observed that the rear yards of the Property were in an unhealthy state and could not be used due to their condition. Waste water was laying over areas of the ground and also running in to the neighbours' yard. A trench had been dug to run the water out onto the gutter. Overflow from the HSTPs could be classed as contaminated, result in a Council fine, cause infections or illness and that the duplex units could be classed as unliveable. In his opinion, both the HSTPs had failed and were ineffective.
- [34] Mr John Morgan is a qualified plumber with 20 years' experience in civil plumbing. He has been certified to install HSTP since 2015 and is familiar with its design and operation. He inspected the Property on 8 January 2019 and prepared an undated report ('the Morgan/Accelerate Civil Report'). Upon inspecting the Property, he observed the pump out tank installed to the rear of Lot 1 was situated below finished ground surface level and that water ponded on some areas of the Property when it was raining. Mr Morgan said that the HSTPs did not effectively complete the treatment, uptake and absorption of the final effluent without the likelihood of the creation of unpleasant odours, accumulation of offensive matter, stormwater run-off entering the HSTPs, unintended and uncontrolled discharge, blockage or leakage. In his opinion, both HSTPs were defective.⁹
- [35] Mr John Cherry was a QBCC Inspector at the relevant time. He is a licensed builder although he does not hold plumbing or drainage qualifications and is not a qualified plumber. He inspected the Property on 2 March 2016 during a period of heavy rain and prepared a report dated 2 March 2016 ('the Cherry Report'). He observed that whilst the ground was dry at the commencement of the inspection, upon the commencement of rainfall, water quickly welled up in the rear yards around where the HSTPs soakage trenches were installed. The yard filled with water around the perimeter retaining walls and away from the evaporation trenches measuring a depth of 40-50mm with the deepest section recorded on the western unit beside the western yard retaining wall of 80mm. Whilst operational, the HSTP alarm did not sound. Mr Cherry's inspection did not include inspection of the internal plumbing of the duplex units. Mr Cherry did not observe evidence of 'defective work'.
- [36] Mr Stephen Ferguson was QBCC Senior Technical Internal Review Officer at the relevant time. He is a licensed builder and his experience includes working as a building inspector and building certifier. He does not hold qualifications in relation

⁷ Applicant's affidavit dated 4 May 2017, [22].

⁸ Applicant's affidavit dated 4 May 2017, [23].

⁹ Statement of Mr John Morgan dated 18 February 2019, Annexure "JM1", page 7: He was of the opinion that the HSTP does not appear to meet the following requirements of items (a), (b), (d), (i), (j) and (n) of the Queensland Plumbing and Wastewater Code.

to plumbing and drainage but in 2003 he undertook one day of training in the siting of effluent disposal areas for the surface irrigation of HSTP effluent. In 2016, he conducted a desktop review of information on the QBCC's file and prepared a report dated 2 March 2016 ('the 2016 Ferguson Report'). On 12 March 2019, he inspected the Property when it was not raining and prepared a report dated 19 May 2019 ('the 2019 Ferguson Report').

- [37] Mr Ferguson observed on Lot 1 that the ground adjacent to the east side of the dwelling included a moss substance indicating high ground moisture level. There was evidence of excess moisture adjacent to the water tank and HSTP tank, at the base of the retaining walls at the rear of the property and above the retaining wall at the rear of the property. The top of the HSTP riser and adjacent fixtures were a minimum 75mm above the ground level. The IO was approximately 50mm above ground level. A yard gully had been provided adjacent to the water tank.
- [38] Mr Ferguson observed on Lot 2, that there was some evidence of a moss substance indicating high ground moisture level on the western side adjacent to the base of the dwelling. The site level to the rear of the property was reasonably level. The top of the HSTP tank was below the adjacent ground level. Mr Formosa advised that the pump to the HSTP tank was turned off to prevent the pump constantly operating when water runoff entered the tank top. Excess moisture was identified at the base of the retaining walls to the rear and west side of the property. The IO was approximately 50mm above the ground level. The HSTP for Lot 2 appeared to be working correctly when it was tested by discharging water from a filled bath through the HSTP drainage.
- [39] Mr Ferguson noted that excessive moisture was evident at the base of the retaining walls at the rear of the property. It appeared that the additional moisture was due to either runoff from the adjacent higher ground level or subsurface moisture content.
- [40] Mr Ferguson believed that there was no evidence that the HSTPs were not generally functioning as designed. However, he accepted that the HSTPs fail when there is 'an enormous amount of rain'. He also accepted the evidence of Mr Formosa and Mr Weir that they observed effluent mixed with water in the rear yard of the Property.¹⁰
- [41] I note that Mr Formosa's evidence in relation to the existence of the Operation Problems was generally consistent with the evidence of Mr Weir and Mr Morgan, who are both qualified plumbers with significant experience with HSTPs.
- [42] I prefer their evidence in relation to the existence of the Operation Problems to that of Mr Cherry and Mr Ferguson for the following reasons:
- (a) Mr Cherry and Mr Ferguson are not qualified plumbers;
 - (b) Mr Cherry did not inspect the internal plumbing of the duplex units and was unable to give evidence about the operation of the internal plumbing;
 - (c) Although Mr Ferguson did inspect the internal plumbing of the duplex units, it was not during a period of rainfall, and he was unable to give evidence about the operation of the internal plumbing during rainfall;

¹⁰¹⁰ Mr Ferguson in cross-examination.

- (d) Mr Cherry inspected the Property during a period of 40 minutes of heavy rainfall. He was not able to give evidence about the extent of the Operation Problems during a period of moderate rain;
- (e) Mr Cherry's evidence that there was significant pooling of water in the rear yards of the Property after a period of heavy rainfall is consistent with the evidence of Mr Formosa, Mr Weir and Mr Morgan;
- (f) Mr Ferguson's evidence that high ground moisture level in the rear yards of the Property was evident is consistent with the evidence of Mr Formosa, Mr Weir and Mr Morgan; and
- (g) Mr Ferguson accepted that the HSTPs fail when there is 'an enormous amount of rain' and the evidence of Mr Formosa and Mr Weir that they observed effluent mixed with water in the rear yard of the Property.

[43] I note that Mr Cherry's evidence that the HSTP alarm was not sounding at the time of his inspection, after approximately 40 minutes of rain, is inconsistent with Mr Formosa's evidence that the high water alarm regularly sounds. As Mr Formosa's evidence is supported by the evidence of Mr Weir and Mr Morgan, I accept that whilst the HSTPs alarms did not sound on the occasion of Mr Cherry's inspection, it has sounded at other times during rainfall.

[44] On the basis of the evidence, I find that the Operation Problems occurred and continue to occur during moderate or greater rainfall.

When did the Operation Problems first become evident?

[45] Mr Formosa said that the Operation Problems first became evident 'from the very first considerable rainfall after handover' in May 2013,¹¹ when it rained in about August 2013¹² and at least by September or October 2013.¹³ When the Operational Problems first presented, Mr Formosa approached the Contractor who referred him to the Sub-Contractor. The Sub-Contractor completed some works to the HSTP but that failed to resolve the problem. In response to Mr Formosa's further queries, the Contractor advised him to monitor the problem during the wet season. Each time the Operational Problems presented, Mr Formosa contacted the 'contractor' as required by the HSTP User Manual. Mr Formosa first contacted the QBCC about the Operational Problems in or about mid-2014 and was verbally advised to endeavour to sort the issue out with the Contractor. He lodged the Complaint with the QBCC on 21 February 2016.¹⁴

[46] I note that in the Complaint, Mr Formosa described the complaint item as 'internal plumbing is not operational when it rains' and stated that the complaint item was first noticed on 22 April 2014 and first notified to the Contractor on 23 April 2014.

[47] I find it difficult to reconcile Mr Formosa's evidence that the Operation Problems first became evident in August 2013 (and at least by September or October 2013)

¹¹ Applicant's affidavit dated 4 May 2017, [3].

¹² Applicant's oral evidence.

¹³ Applicant's oral evidence in re-examination.

¹⁴ Applicant's affidavit dated 4 May 2017, [7]-[9].

with his statement in the Complaint that the Operation Problems were first noticed on 22 April 2014.

[48] There is no evidence as to when Mr Formosa first approached the Contractor and the Sub-Contractor regarding the Operation Problems.

[49] On balance, I prefer the evidence recorded in the Complaint that Mr Formosa first noticed the Operation Problems on 22 April 2014 because that is what he advised the QBCC at that time. I accept Mr Formosa's evidence that he first contacted the QBCC about the Operational Problems in or about mid-2014 and was verbally advised to endeavour to sort the issue out with the Contractor, which he attempted to do prior to making the Complaint.

[50] On that basis, I find that the Operation Problems first became evident on or about 22 April 2014.

In respect of the HSTP for Lot 1, did placement of the top of a vent below ground-level cause the Operation Problems?

[51] Mr Formosa submits that the Operation Problems were caused, at least in part, by the placement of the top of the pump out tank vent for Lot 1 below ground-level.

[52] Mr Morgan said that the pump out tank vent for Lot 1 is located below ground-level, which is inconsistent with tank installation requirements. He believes that has resulted in overland water flow being directed into the pump out tank and potential discharge of untreated sewage from the tank into the yard.

[53] Mr Ferguson accepted that the top of the HSTP tank on Lot 1 is below ground-level. Mr Ferguson also accepted that that could cause the tank to overflow due to water entering the tank. Further it could, by itself or in combination with other causes, cause problems in the nature of the Operation Problems.

[54] On the basis of the above evidence, I find that:

- (a) The pump out tank vent for Lot 1 is located below ground-level;
- (b) That is inconsistent with tank installation requirements;
- (c) That has resulted in overland water flow being directed into the pump out tank; and
- (d) That is, at least in part, a cause of the Operation Problems.

In respect of both HSTPs, did the unreliable design of the HSTPs for the Property cause the Operation Problems?

[55] Mr Formosa submits that the Operation Problems were, at least partly, caused by unreliable design of the HSTPs for the Property. Mr Formosa submits that the design was unreliable for the Property because it relied upon unreliable soil testing.

[56] On 4 February 2012, a Site Investigation Report ('the Soil Report') was prepared by Bowler Geotechnical Whitsunday ('Bowler') for the Contractor in relation to the Property. The Soil Report was clearly prepared prior to commencement of the Works on or about 20 August 2012. It seems likely, and it is not in dispute, that the

Soil Report was also prepared prior to any excavation in preparation for the Works.¹⁵ The Soil Report reported the findings of an investigation to determine foundation conditions and to classify the Property in accordance with Australian Standard *AS2870-1996 Residential Slabs and Footings*.¹⁶ The investigation included drilling of two boreholes at identified locations on the Property and assessment of the soil samples taken at each borehole. The Soil Report stated that:

- (a) Borehole 1 went to a depth of approximately 1.2 metres and Borehole 2 went to a depth of approximately 1.5 metres;¹⁷
- (b) The results of the fieldwork indicated that uniform subsurface conditions existed at the borehole locations;
- (c) The material encountered in Boreholes 1 and 2 indicated loose non plastic silty sand, overlying stiff medium plastic sandy gravelly clay to a borehole termination at 1.5 metres;
- (d) The results of the site investigation work indicated that the site may be classified Class 'S' in accordance with AS2870-1996 '*Residential Slabs and Footings*'; and
- (e) The soil classification could change considerably if any site excavation and or filling are undertaken.

[57] On 15 February 2012, an On-Site Effluent Disposal Report ('the HSTP Suitability Report') was prepared by Water Wise for the Contractor in relation to the proposed duplex units at the Property. It seems likely, and it is not in dispute, that the HSTP Suitability Report was prepared prior to excavation of the Property.¹⁸ The HSTP Suitability Report 'assessed the suitability of the site for on-site effluent disposal and for the management of sewage within the development'.¹⁹ The HSTP Suitability Report:

- (a) Referred to and was clearly based, at least in part, on the soil test results reported in the Soil Report. It stated that the Soil Report:
 - indicates sandy silty top soil to a sandy clay. This is consistent throughout the whole area. The permeability 6.16-0.12 = design load rating of 11 and this indicates the soil is a Category 4 clay loam and being weakly structured (no ground water encountered)
- (b) Noted that the Property was 'well drained', 'underlying strata will not present any constraints to the proposed effluent disposal due to the underlying clay loam soil' and 'nil groundwater encountered';

¹⁵ The Soil Report states that at the time of the inspection, the Property was 'sloping, grass covered, has a 12m gum tree inside footprint and the site appears to be free draining'. That is significantly different from more recent photographs and descriptions of the Property.

¹⁶ Applicant's affidavit dated 4 May 2017, at Annexure 8: Soil Report.

¹⁷ Borehole log sheet attached to the Soil Report.

¹⁸ It is apparent from the description of the Property in the HSTP Suitability Report, despite it referring to an 'existing dwelling'.

¹⁹ Applicant's affidavit dated 4 May 2017, at Annexure 9: Waterwise Report.

- (c) Concluded that the Property was '[a]dequate for effluent disposal (soil structure weak)' and that 'the results indicate a treatment system producing advanced secondary effluent be installed on this site'; and
- (d) Confirmed, on that basis, that the Property was suitable for the HSTPs for the proposed duplex units.

[58] The authors of the Soil Report and the HSTP Suitability Report were not called to give evidence. Nor was the Contractor.

[59] Mr Morgan observed that there are inconsistencies in the description of the Property in the Soil Report and the HSTP Suitability Report. For example, section 2.2 of the HSTP Suitability Report describes the Property as '2.2 Slopes and Drainage – Slope on site is 1:160 Site drainage is characterized by sheet spread to the front of the site to the road reserve & table drain'. He believes that indicates a modification to the Property following the soil test being undertaken. In addition, he noted that section 3.4 of the HSTP Suitability Report states that 'The existing dwelling has an existing rain water disposal system to kerb', which is an apparent error as the Property was vacant prior to construction of the Works. He believes those are errors which are cause for concern as the HSTPs' design may be incompatible with the Property.²⁰

[60] Mr Formosa said that after the soil testing and prior to commencement of the Works, the Property was excavated to a depth of two metres at the rear of the Property where the HSTPs' soakage trenches were installed.²¹ The Soil Report was unreliable for the purpose of determining the suitability of the HSTPs for the proposed duplex units at the Property because it only assessed the soil at a maximum of 1.5 metres on the Property and it did not consider the actual soil conditions where the soakage trenches were installed after excavation of the Property. Mr Formosa said that the HSTP Suitability Report was unreliable because it was based on the Soil Report and that was at least a partial cause of the Operation Problems.

[61] Mr Ferguson²² estimates from photographs and his inspection of the Property that the excavation at Borehole 1 was approximately one metre (with the consequence that the soil test result for Borehole 1 was in respect of a depth of approximately 0.5 metres of the remaining soil after excavation) and the excavation at Borehole 2 was approximately 0.6 metres (with the consequence that the soil test result for Borehole 2 was in respect of a depth of approximately 0.9 metres of the remaining soil after excavation).

[62] I prefer Mr Formosa's evidence to that of Mr Ferguson in relation to the depth of the excavation performed subsequent to the soil testing. Mr Ferguson's evidence is based on his estimation from photographs and his inspection of the Property after completion of the excavation and the Works. As Mr Formosa observed the Property prior to excavation, I consider that he is best placed to have direct and accurate knowledge of the depth of the excavation. In giving his evidence, Mr Formosa generally presented as frank and forthright and there is an absence of contrary direct

²⁰ Statement of Mr John Morgan dated 18 February 2019, Annexure "JM1", page 6.

²¹ Applicant's affidavit dated 11 January 2019, [31]-[32].

²² Mr Ferguson in cross-examination.

evidence on the matter. For those reasons, I accept Mr Formosa's evidence in that regard.²³

[63] On the basis of the above evidence, I find that:

- (a) Soil testing was performed prior to excavation of the Property;
- (b) At the time of the soil testing, the Property sloped at about 5% towards the front of the Property which borders Brookfield Drive;
- (c) The soil testing was performed in respect of soil excavated to a depth of:
 - (i) Approximately 1.2 metres at Borehole 1; and
 - (ii) Approximately 1.5 metres at Borehole 2;
- (d) The soil testing indicated that:
 - (i) Uniform subsurface conditions existed at the borehole locations;
 - (ii) The soil tested at both Borehole 1 and Borehole 2 was a loose non plastic silty sand, overlying stiff medium plastic sandy gravelly clay;
 - (iii) The soil tested was classified Class 'S' in accordance with AS2870-1996 *'Residential Slabs and Footings'*; and
- (e) Subsequent to the soil testing, the Property was excavated to a depth of two metres at the rear of the Property where the HSTP soakage trenches were installed.

[64] It is apparent from the Soil Report that the lower levels of soil tested had more of a clay component than the upper levels of soil tested. That indicates the changing nature of the soil as it descended to lower levels, even over the 1.5 metre depth tested.

[65] The Soil Report acknowledged that soil classification could change considerably after excavation of the Property. Mr Ferguson accepted that was possible.²⁴

[66] Mr Ferguson acknowledged that there was no investigation as to the soil type after excavation of the Property and whether the soil surrounding the installed HSTPs was the same as the soil tested.²⁵

[67] The Tribunal has not been provided with any evidence of a suitably qualified person, based on proper soil analysis, which confirms the type and qualities of the soil in which the HSTPs were installed subsequent to excavation.

[68] Mr Morgan believed it was unlikely that the soil tested was representative of the current ground conditions in which the HSTPs were installed after excavation of the Property. Noting that he holds no geotechnical qualifications, he observed that the

²³ Applicant's affidavit dated 11 January 2019, [31]-[32].

²⁴ Mr Ferguson, cross-examination.

²⁵ Mr Ferguson, cross-examination.

soil surrounding the HSTPs does not appear to have the characteristics expected of Class ‘S’ (Slightly Reactive) soil described in the Soil Report.²⁶

- [69] There is considerable evidence which indicates that the soil in which the HSTPs was installed has a high water content. Mr Ferguson noted that ‘[T]he identification of excessive moisture to the front of this property and adjacent properties confirms that this soil type holds water’.²⁷ Mr Ferguson’s evidence of excessive moisture on the Property is consistent with descriptions by Mr Cherry, Mr Morgan and Mr Formosa of significant surface water in the rear yards of the Property.
- [70] That is inconsistent with the HSTP Suitability Report which described the soil as ‘well drained’, ‘underlying strata will not present any constraints to the proposed effluent disposal due to the underlying clay loam soil’ and ‘nil groundwater encountered’.
- [71] That evidence reinforces the probability that the soil testing referred to in the Soil Report and the HSTP Suitability Report was not representative of soil conditions in which the HSTPs were installed and that the HSTP was therefore unreliable for the purpose of determining the compatibility of the soil for efficient operation of the HSTPs.
- [72] The Advanced Enviro-Septic Home Owner’s Manual (‘the HSTP User Manual’) was the manufacturer’s manual for operation of the HSTPs. It relevantly states:²⁸

The capacity of the Enviro-Septic System depends on two elements:

- The number of Enviro-Septic Pipes
- The capacity of the underlying soil to evacuate the treated water...

The system may also be limited by the capacity of the underlying soil to permit the infiltration and evacuation of wastewater. This value should be evaluated by the designer mandated to create the plans and estimates for your septic installation. It is, therefore, important to verify with the designer if the capacity of the soil permits complete infiltration and evacuation of the maximum amount of water able to be treated by the pipes installed.

(Emphasis added)

- [73] Mr Morgan said that, whilst that HSTPs are generally a reliable system, their effectiveness is dependent upon the location and environment where they are installed. He noted that the HSTP Design Calculator ²⁹specifically states that HSTPs are “*Always the BEST option*” until site and soil conditions rule it out’. This highlights the necessity for compatible surrounding soil. He believes the Operation Problems at the Property are likely caused, at least in part, by incompatible soil type.
- [74] Mr Craig Goss is the Assistant Area Manager of Construction Sciences which specialises in geotechnical engineering, construction materials testing, environmental consulting and subsurface utility engineering. He has considerable

²⁶ Statement of Mr John Morgan dated 18 February 2019, Annexure “JM1”, pages 5-6.

²⁷ In the 2019 Ferguson Report.

²⁸ HSTP User Manual, Applicant’s affidavit dated 4 May 2017, Annexure 2, page 6.

²⁹ Which is used to assist in determining whether a HSTP system is appropriate for a particular site.

experience in preparing waste water management plans. In his opinion the HSTPs would not be a workable system for duplex units at the Property having regard to the requirements of Australian/New Zealand Standard 1547-2012 *Onsite domestic wastewater management* standard and the Queensland Waste Water Code.

- [75] Mr Cherry accepted that if soil surrounding the HSTPs disposal area soakage trenches was not of a type which allows free drainage in and around the soakage trenches, that could contribute to problems with operation of the HSTPs.³⁰
- [76] Mr Ferguson³¹ accepted that if the soil test results noted in the Soil Report and the HSTP Suitability Report were not representative of the actual soil type, the suitability of the design of the HSTPs for the Property may have to be reviewed. He accepted that the soil type being unsuitable for drainage could, by itself or in combination with other issues, cause problems in the nature of the Operation Problems.
- [77] There is no dispute that the suitability of the HSTPs for the Property is dependent upon them being installed in compatible surrounding soil. That is consistent with the statement in the HSTP Design Calculator that HSTPs are *“Always the BEST option” until site and soil conditions rule it out’*.
- [78] On the basis of the above evidence, I am satisfied on the balance of probabilities and I find that:
- (a) The nature and qualities of the soil in which the HSTPs were installed subsequent to excavation, differed from the description of the soil set out in the Soil Report;
 - (b) The Soil Report and the HSTP Suitability Report were unreliable for the purpose of determining the suitability of the HSTPs for the proposed duplex units at the Property;
 - (c) The nature and qualities of the soil in which the HSTPs were installed subsequent to excavation, was incompatible with the efficient and proper operation of the HSTPs; and
 - (d) That incompatibility was at least a partial cause of the Operation Problems.

In respect of both HSTPs, did insufficient disposal area size cause the Operation Problems?

- [79] Mr Formosa submits that the Operation Problems were, at least partly, caused by the size of the HSTPs’ disposal areas being insufficient.
- [80] The HSTP Suitability Report stated that the disposal area required for the HSTPs is 66 square metres. It noted that minimum distances from property boundaries and water courses were all well within those prescribed by AS/ANZ 1457:2000. It stated that there was sufficient land area for effluent disposal.

³⁰ Mr Cherry in cross-examination.

³¹ Mr Ferguson in cross-examination.

- [81] Mr Morgan said that the HSTPs' disposal area was insufficient. He is of the opinion that the requirements of item 4 of the Plumbing Approval was not complied with because the HSTPs do not appear to meet the requirements of items (a), (b), (d), (i), (j) and (n) of the Queensland Plumbing and Wastewater Code.
- [82] Further, although no site survey has been undertaken Mr Morgan believes that, taking into account required separation distances from retaining walls and footings and the location of retaining walls and rainwater tanks inside the Property boundary, it is likely that the size of the HSTPs' disposal areas is less than the required 66 square metres and therefore insufficient to process the effluent on site.³² Mr Morgan said that a photograph of the property taken at the time of installation of the HSTPs appeared to show that the location of the HSTPs is within the required two metre setback distance from the footing of the retaining wall.³³
- [83] Mr Weir said that normally a disposal area of between 250 and 300 square metres is required for efficient operation of a septic system for a house. In his opinion, there was insufficient disposal area size for efficient operation of the two HSTPs at the Property.³⁴ I note that Mr Weir's estimation of suitable disposal area size differs considerably from the size stated in the HSTP Suitability Report. The basis for his differing view was not explored in evidence.
- [84] Mr Ferguson said that he assumed that the HSTP disposal area was sufficient and in accordance with the HSTP Suitability Report. He is unable to comment on Mr Weir's evidence that the HSTPs' disposal areas were insufficient.
- [85] Mr Ferguson's assumption is based on the following documents which were issued by the Mackay Regional Council in relation to the Property:
- (a) A Development Permit for Material Change of Use – Dual Occupancy development ('the Development Approval') that was issued on 11 or 12 July 2012:
 - (i) The Development Approval approved a Material Change of Use – Dual Occupancy development for the Property in accordance with a Plan of Development and subject to specified conditions;
 - (ii) The Development Approval relevantly stated:

21. On-site Waste Water Disposal

The effluent disposal system must be provided in accordance with the approved plan of development 152121-H-001-PR-A, dated Feb 2012 and Report by Water Wise Design Pty Ltd dated 15-02-2012.
 - (b) A Compliance Permit ST11222 ('the Plumbing Approval') that was issued 24 September 2012:

³² Statement of Mr John Morgan dated 18 February 2019, Annexure "JM1", page 6.

³³ Statement of Mr John Morgan dated 18 February 2019, Annexure "JM1", page 7 and Appendix 6 – photo 1.

³⁴ Oral evidence of Mr Weir given during cross-examination.

- (i) The Plumbing Approval gave approval to commence specified plumbing and drainage work ‘in accordance with the *Plumbing and Drainage Act 2002*, the approved plans and the attached conditions of approval’;
- (ii) The Plumbing Approval stated that the approved plans were:
 - Site Plan – 11/192 Sheet 11
 - Drainage Plan – 11/192 Sheet 12
 - Sewer Plan – Bowler HS/12021
- (iii) The Plumbing Approval referred to the HSTP Suitability Report as a ‘supporting document’.
- (iv) The Conditions of Approval of the Plumbing Approval included:
 - 4. All work is to comply with the Queensland Plumbing and Wastewater Code and AS/NZS1547-2000.
 - ...
 - 6. The size and location of disposal area has been designed by Water Wise Design Hydraulic Services & Advanced Enviro-Septic and is approved in good faith. *Council accepts no responsibility for incorrect location of disposal area.*
 - 7. The proposed AES on site sewerage system is approved for installation as an alternative solution under the provisions of the Queensland Plumbing and Wastewater Code.
- (v) The Plumbing Approval also stated:
 - This plumbing and drainage work approval does not imply that issues/requirements relating to planning and/or building legislation are complied with.
- (c) A Compliance Certificate (‘the Compliance Certificate’) that was issued under s 86(9) of the *Plumbing and Drainage Act 2002* (Qld) after completion of the plumbing and drainage work at the Property:
 - (i) The Compliance Certificate referred to the Plumbing Approval;
 - (ii) The Compliance Certificate is a form which had various boxes ticked to note compliance with relevant items;
 - (iii) The Compliance Certificate relevantly stated:
 - Mackay Regional Council also received a satisfactory compliance report, from the responsible person for the work, for the testing and commissioning of the following items:
 - ✓ Hot and cold water pressure test
 - Commissioning certificate for on-site sewerage facilities

- ✓ Installation of sub surface irrigation or absorption trench (Form 8)
- Commissioning certificate for TMCV/backflow devices; and

(iv) It appears that the Compliance Certificate did not certify the receipt of a satisfactory compliance report for the testing and commissioning of the on-site sewerage facilities and the TMV/backflow devices.

[86] Mr Ferguson said that the Compliance Certificate indicates that the HSTPs and associated disposal areas have been installed in accordance with the Plumbing Approval. On that basis, he assumes that sufficient disposal area size has been provided for the HSTPs.

[87] With respect, I do not agree with Mr Ferguson's conclusion in that regard because the Compliance Certificate specifically omitted positive confirmation of satisfactory compliance with requirements for the HSTPs. Further, I do not agree with Mr Ferguson's assertions that the omission should be disregarded by the Tribunal as a likely accidental error and that the existence of positive confirmation of compliance with that item can be inferred from the issue of the Compliance Certificate generally.

[88] Evidence was not given by the authors of the Development Approval, the Plumbing Approval and the Compliance Certificate nor any other representative of the Mackay Regional Council.

[89] It appears to me that the omission was more likely deliberate. This gives me cause for concern about the HSTPs' compliance with the various stipulated requirements, including the size of the disposal area.

[90] But given the inconsistency between the evidence, the absence of any direct evidence which explains the omission and the absence of a site survey undertaken after installation of the HSTPs, it is difficult to determine how, if at all, the HSTPs failed to comply with the various stipulated requirements, including the size of the disposal area.

[91] Despite my concerns, having regard to the evidence, I am unable to conclusively determine that the HSTPs' disposal areas was insufficient and that any insufficiency was a cause of the Operation Problems.

In respect of both HSTPs, did inadequate stormwater drainage and diversion cause the Operation Problems?

[92] Mr Formosa submits that the Operation Problems were, at least partly, caused by inadequate drainage and stormwater diversion at the Property.

[93] Mr Formosa, Mr Morgan, Mr Cherry and Mr Ferguson identified that the excavation and grading in the rear yard of the Property has resulted in water pooling in that particular area upon moderate rainfall.

[94] Mr Weir identified inadequate stormwater drainage and diversion as a likely cause of the Operation Problems. Mr Weir said that the HSTP Suitability Report did not

refer to stormwater diversion work which he believes was a defect in the design of the HSTPs' installation on the Property.

[95] Mr Cherry said that:

- (a) The current overland flow from surrounding properties allows water to pond around the evaporation trenches and is the likely cause for poor performance during prolonged rain periods. Management of the overland flow at the rear of the yard would aid in the performance of the system during rain events;³⁵
- (b) When he inspected the Property during heavy rain, the rear yard filled with water around the perimeter retaining walls and away from the evaporation trenches measuring a depth of 40-50mm with the deepest section recorded on the western unit beside the western yard retaining wall of 80mm. After 40 minutes of rain, much of the yard was under water with the evaporation trench batter above the water line; and
- (c) The moisture from the HSTP disposal area soakage trenches may have nowhere to go if the surrounding soil is saturated.

[96] Mr Ferguson said that:³⁶

- (a) He observed that the Property was within an area of high sub-surface moisture content. Excessive moisture was also evident at the base of the retaining walls at the rear of the property. It appeared that the moisture was due to either runoff from the adjacent higher ground level or subsurface moisture content;
- (b) In his experience, problems with operation of HSTPs in similar properties occurred where the water table was high and drainage was insufficient;
- (c) He believes there is a problem with drainage at the rear of the Property because there is too much water coming onto the Property out of the hill to the rear and sides of the Property;
- (d) He believes that the Contractor installed some drainage at the rear of the Property near the retaining walls; and
- (e) He does not know if drainage at the retaining wall at the rear of the Property is sufficient. He did not enquire with the author of the HSTP Suitability Report as to whether, once the Works were completed, the stormwater diversion was sufficient for the HSTP to operate effectively.

[97] The Development Approval relevantly stated:

18. Ponding and Diversion of Stormwater

Ponding of stormwater resulting from the development must not occur on adjacent sites and stormwater formerly flowing onto the site must not be diverted onto other sites. The site shall be graded so that it is free draining...

(Emphasis added)

³⁵ Cherry Report.

³⁶ 2019 Ferguson Report and oral evidence.

- [98] The HSTP Suitability Report stated that the Property was ‘well drained’. However a Waste Water Disposal Soil and Site Evaluation Form which was annexed to the HSTP Suitability Report stated that there was a need to ‘divert ground water’.³⁷ The author of the HSTP Suitability Report was not called to give evidence.
- [99] I note that since the HSTP Suitability Report was prepared, the Property has been substantially excavated to a depth of two metres at the rear of the Property where the HSTP soakage trenches were installed.³⁸ At the rear of the Property, the land now grades downwards away from the duplex units towards the retaining walls.
- [100] Mr Weir, Mr Cherry and Mr Ferguson all acknowledge the considerable impact of overland water flow on the Property and likely problems with drainage which detrimentally impact the efficient operation of the HSTPs.
- [101] On the basis of the above evidence, I find that:
- (a) The excavation and grading in the rear yard of the Property has resulted in water pooling in that particular area upon moderate rainfall;
 - (b) Stormwater drainage and diversion is inadequate to manage overland water flow from surrounding properties which causes water to pond around the HSTPs evaporation trenches; and
 - (c) That is at least a partial cause of the Operation Problems.

In respect of both HSTPs, did a lack of maintenance of the HSTPs cause the Operation Problems?

- [102] The QBCC submitted that the Operation Problems could be the result of a lack of maintenance of the HSTPs rather than any defect in their installation.
- [103] The HSTP User Manual states that the septic tank ‘must be pumped out regularly every 3-5 years for normal residential use or sludge exceeds 2/3 of the tank’ and in accordance with council regulations. Further, it states that ‘[if] the septic tank is not emptied regularly, an increasingly large amount of solids and grease in suspension will leave the septic tank and end up in the treatment system and in time the performance of the Enviro-Septic System may be affected’.³⁹
- [104] Mr Formosa conceded that the HSTPs’ septic tanks were not emptied. However, he asserted that was not the cause of the Operation Problems because the Operation Problems first became evident well before the septic tanks were required to be emptied in accordance with the HSTP User Manual.
- [105] I accept that the HSTP User Manual requires that the septic tanks must be pumped out every three to five years.
- [106] The Works reached practical completion on or about 14 May 2013. It was not necessary to first pump out the septic tanks until three to five years later, being some time between mid-May 2016 and mid-May 2018.

³⁷ Item 3.3.

³⁸ I refer to my findings above.

³⁹ HSTP User Manual, Applicant’s affidavit dated 4 May 2017, Annexure 2, page 15.

[107] As set out above, I find that the Operation Problems first became evident on 22 April 2014, which was well before the septic tanks were first required to be pumped out.

[108] On that basis, I find that a lack of maintenance of the HSTPs did not cause the Operation Problems.

In respect of both HSTPs, did misuse of the HSTPs cause the Operation Problems?

[109] The QBCC submitted that misuse of the HSTPs could be a cause of the Operation Problems, particularly given the undisputed fact that the Property was tenanted for at least part of the time and that it is unknown how the tenants used the HSTPs.

[110] There is no direct evidence or circumstantial evidence to support a finding that misuse of the HSTPs occurred and caused the Operation Problems.

[111] The mere existence of the Operation Problems and that it is unknown how the tenants used the HSTPs is not, in the context of the other possible causes which are discussed in these reasons, a reasonable basis to infer that misuse of the HSTPs occurred and caused the Operation Problems.

[112] Having regard to the evidence, I find that misuse of the HSTPs did not cause the Operation Problems.

In respect of both HSTPs, did other unknown reason/s cause the Operation Problems?

[113] The QBCC submitted that other unknown reason/s caused the Operation Problems.

[114] In my view it is not reasonable to infer that other unknown reason/s caused the Operation Problems. There is no direct or circumstantial evidence of other causes other than the existence of the Operation Problems. I have found likely causes of the Operation Problems which are set out above.

[115] Having regard to the evidence, I find that other unknown reason/s did not cause the Operation Problems.

Was the Contractor responsible for the Operation Problems?

[116] Mr Formosa submits that the Contractor was responsible for the Operation Problems.

[117] The QBCC accepts that the Contractor was responsible for the top of the HSTP tank for Lot 2 being below the adjacent ground level, which was at least partly a cause of the Operation Problems.

[118] The QBCC denies that the Contractor is otherwise responsible for the Operation Problems.

[119] With the exception of the top of the HSTP tank for Lot 2 being below the adjacent ground level, Mr Ferguson was not able to identify that the Contractor was responsible for the Operation Problems.

[120] Mr Ferguson's conclusions were primarily based on the following reasons:⁴⁰

- (a) There was no evidence that the HSTP and associated disposal area had not been installed in accordance with the plumbing approval;
- (b) There was no evidence that the surface drainage provided to the perimeter of the dwelling did not comply with the approved certifier plans nor the BCA;
- (c) A licensed designer had designed the HSTP system and the Plumbing Approval was issued by the Mackay Regional Council;
- (d) The Mackay Regional Council had issued the Compliance Certificate stating that the plumbing installation complied with the Council Plumbing Approval;
- (e) No testing nor investigation confirmed that the installation of the HSTPs was defective; and
- (f) He does not believe it was the Contractor's responsibility to ensure that the drainage at the rear of the Property was adequate. He believes that the Contractor's responsibility was only to ensure that the land surface grades away from the duplex units and from the HSTP itself.

[121] In *Glen Williams Pty Ltd v Queensland Building Services Authority* [2012] QCAT 127 at [12] to [16], Member Cullen considered decisions which considered, in the context of a direction to rectify, the responsibility of a builder who had followed professional plans or specifications. Member Cullen noted at [12] that:

Whilst I understand Mr Williams' concerns that he was merely following the plans prepared by other professionals, the law in this area is now well settled. The QBSA Act is quite specific in making the builder responsible for any defective work, despite the involvement of other professionals. Here, for reasons of consumer protection, the intent of the parliament is to clearly lay responsibility for defective building works squarely at the feet of the builder. As unsettling as this is may be for builders, particularly, in circumstances where the professionals Mr Williams relied upon arguably have more specialist training and expertise than does he, it remains the clear intent of the QBSA Act. Moreover, it has previously been held that fault by the builder need not be established in order for rectification to be directed:

Each case, however, will need to be determined according to its own facts, and fault or no fault will not necessarily be the determining factor as to whether or not the direction to rectify will be made.⁴¹

[122] I accept that the issue for determination in this case is in relation to a claim for insurance rather than a direction to rectify. However, I consider that the underlying principles are similar.

[123] Relevant to this case, section 67X(2) of the QBCC Act states that '[T]he purpose of the statutory insurance scheme is to provide assistance to consumers of residential construction work for loss associated with work that is defective or incomplete'. The

⁴⁰ See 2016 Ferguson Report, conclusion.

⁴¹ *Gary Norwood Homes Pty Ltd v Queensland Building Services Authority* [1997] QBT 193.

intent of the parliament is clearly to assist consumers of residential construction work for loss associated with defective work.

- [124] The issue of whether the work is ‘defective’ is to be determined having regard to the facts of the particular case.
- [125] As I explained above, I am satisfied that the Soil Report and the HSTP Suitability Report were likely unreliable for the purpose of determining the suitability of the HSTPs for the proposed duplex units at the Property because they assessed the compatibility of different soil to the soil in which the HSTPs were installed after excavation works were completed. The soil in which the HSTPs were installed subsequent to excavation was likely incompatible with the efficient and proper operation of the HSTPs and that was at least a partial cause of the Operation Problems.
- [126] The HSTP Suitability Report and the HSTP User Manual clearly indicated the importance of soil compatibility in determining the suitability of the HSTPs for a particular site.
- [127] Further, the Soil Report clearly stated that the soil classification could change considerably if any site excavation and or filling was undertaken.
- [128] As I explained above, I am also satisfied that excavation and grading in the rear yard of the Property, in combination with inadequate stormwater drainage and diversion, has resulted in water pooling in that particular area upon moderate rainfall and that is at least a partial cause of the Operation Problems.
- [129] I note that the Plumbing Approval stated that the ‘site shall be graded so that it is free draining’. However, the Contractor did not achieve that.
- [130] The Contractor has not given evidence in this matter. However given the nature of the contract between the Contractor and Mr Formosa, it is reasonable to assume that the Contractor would have had knowledge of the extent of excavation undertaken on the Property prior to construction of the Works. At the very least, the Contractor should have been put on notice that excavation works had been undertaken and that the Soil Report may no longer be relevant for determining the suitability of the HSTPs and stormwater drainage and diversion could be adversely affected.
- [131] For the reasons set out above, I find that:
- (a) It was or should have been within the reasonable knowledge or expectation of the Contractor that:
 - (i) The nature and quality of the soil could be different after excavation of the Property;
 - (ii) Soil compatibility was critical to the efficient operation of the HSTPs;
 - (iii) It was not entitled to rely on the Soil Report and the HSTP Suitability Report for the purposes of assessing soil suitability for the HSTPs;
 - (iv) Reliance on the Soil Report and the HSTP Suitability Report may result in the Operation Problems; and

- (v) Stormwater drainage and diversion may be inadequate;
- (b) The Contractor nevertheless proceeded to install the HSTPs;
- (c) The Contractor failed to take all reasonable steps to ensure that:
 - (i) The pump out tank vent of the AES Enviro-Cycle Home Sewage Treatment Plant ('HSTP') at Lot 1, 27 Brookfield Drive, Sarina Beach, Queensland was not located below ground-level;
 - (ii) The nature and qualities of the soil in which the HSTPs at Lots 1 and 2, 27 Brookfield Drive, Sarina Beach, Queensland were installed was compatible with the efficient and proper operation of the HSTPs;
 - (iii) Stormwater drainage and diversion at Lots 1 and 2, 27 Brookfield Drive, Sarina Beach, Queensland was adequate for the efficient operation of the HSTPs on those Lots;
- (d) The Contractor failed to take all reasonable steps to ensure that the Operation Problems did not occur.

[132] In the circumstances, the Contractor's reliance on the Soil Report and the HSTP Suitability Report should not relieve the Contractor of its responsibility and culpability for the defective work which caused the Operation Problems.

[133] Further, the Mackay Regional Council's issue of the Plumbing Approval and the Compliance Certificate should also not relieve the Contractor of its responsibility and culpability. That position is further confirmed by the fact that the Compliance Certificate specifically omitted positive confirmation of satisfactory compliance with requirements for the HSTPs, which potentially indicates the Council's concerns regarding the HSTPs.

[134] On that basis, I find that the Contractor was responsible for the Operation Problems and that the Works on the Property were defective in the following manner:

- (a) The pump out tank vent of the AES Enviro-Cycle Home Sewage Treatment Plant ('HSTP') at Lot 1, 27 Brookfield Drive, Sarina Beach, Queensland is located below ground-level;
- (b) The nature and qualities of the soil in which the HSTPs at Lots 1 and 2, 27 Brookfield Drive, Sarina Beach, Queensland were installed is incompatible with the efficient and proper operation of the HSTPs;
- (c) Stormwater drainage and diversion at Lots 1 and 2, 27 Brookfield Drive, Sarina Beach, Queensland is inadequate for the efficient operation of the HSTPs on those Lots.

Did Mr Formosa comply with the three month time limit for making an insurance claim under Part 4.5 of the Insurance Policy Conditions and, if not, should the Tribunal allow him further time to make the claim?

[135] As set out above, I have found that the Operation Problems first became evident on or about 22 April 2014.

- [136] Further, I found that when Mr Formosa first contacted the QBCC about the Operational Problems in or about mid-2014, he was verbally advised to endeavour to sort the issue out with the Contractor. He attempted to do so prior to making the Complaint.
- [137] Mr Formosa lodged the Complaint with the QBCC on 21 February 2016. That is the date on which Mr Formosa is taken to have made the claim for insurance under the Insurance Policy Conditions.
- [138] It is not in dispute that the defective work should be appropriately classified as a category 1 defective work under the Insurance Policy Conditions and the Defects Policy.
- [139] It is also not in dispute that Mr Formosa did not comply with the requirements of section Part 4.5 of the Insurance Policy Conditions and Item (3) of the Defects Policy to make the claim for insurance within three months of the defect becoming evident (on the basis it is a category 1 defect).
- [140] The issue to be determined is whether Mr Formosa should be allowed an extension of time to make the claim for insurance.
- [141] I accept that the claim for insurance under the Insurance Policy Conditions was made some considerable time outside of the applicable three month time limit.
- [142] However, I consider that the following matters make it appropriate for an extension of time to be granted:
- (a) I accept the evidence of Ms Zarb that the only reason that the QBCC refused the insurance claim was because there was no defective work. That is consistent with the QBCC's Statement of Reasons dated 12 September 2017 in relation to the decision under review and indeed with the other evidence;
 - (b) It is not in dispute and I accept that at no time prior to the final hearing of the proceedings, has the QBCC raised with Mr Formosa the issue of him not having complied with the requirement to make an insurance claim within three months of the defect first becoming evident as a basis for refusing the insurance claim;
 - (c) When Mr Formosa first contacted the QBCC about the Operational Problems in or about mid-2014 (which would quite possibly have been within the time period or at least not far outside of the time period), he was verbally advised to endeavour to sort the issue out with the Contractor. He followed that instruction and attempted to do so prior to making the Complaint;
 - (d) I do not agree with the QBCC's submissions that Mr Formosa's delay in making the claim prejudiced prompt determination of the cause of the Operational Problems. As set out above, I accept that when Mr Formosa first contacted the QBCC about the Operational Problems in or about mid-2014, he was verbally advised to endeavour to sort the issue out with the Contractor, which he attempted to do prior to making the Complaint. Further, it appears from the evidence that the failure to determine the extent and cause of the Operational Problems was more likely the result of failure to properly

investigate Mr Formosa's Complaint rather than his delay in making the Complaint;

- (e) Considering the evidence, I am satisfied that the cause of the Operation Problems and the fact that the Contractor was responsible due to defective work would have been a matter of some uncertainty for Mr Formosa until the Complaint was investigated by Mr Morgan and Mr Weir.

[143] In the circumstances, I consider it is reasonable to extend the time for Mr Formosa to make the claim for insurance under the Insurance Policy Conditions to the date when it was made, namely 21 February 2016. Mr Formosa's claim for insurance should not be denied.

Costs

[144] I will make orders allowing the parties to make submissions on costs once they have considered this decision. I would urge the parties to have discussions as to costs, if they are sought, before entering into further proceedings, and attempt to resolve any claims between themselves before entering into further dispute.

What orders should the Tribunal make?

[145] Pursuant to section 24(1) of the QCAT Act, the orders that can be made by the Tribunal on review are:

- (a) Confirm or amend the decision;
- (b) Set aside the decision and substitute its own decision; or
- (c) Set aside the decision and return the matter to the QBCC to reconsider the decision, with directions the Tribunal considers appropriate.

[146] On the basis of the matters set out above, I order as follows:

1. Mr Formosa is allowed an extension of time until 21 February 2016 to make an insurance claim under the Queensland Building and Construction Commission Insurance Policy Conditions in respect of the following defective works:
 - (a) The pump out tank vent of the AES Enviro-Cycle Home Sewage Treatment Plant ('HSTP') at Lot 1, 27 Brookfield Drive, Sarina Beach, Queensland is located below ground-level;
 - (b) The nature and qualities of the soil in which the HSTPs at Lots 1 and 2, 27 Brookfield Drive, Sarina Beach, Queensland were installed is incompatible with the efficient and proper operation of the HSTPs; and
 - (c) Stormwater drainage and diversion at Lots 1 and 2, 27 Brookfield Drive, Sarina Beach, Queensland is inadequate for the efficient operation of the HSTPs on those Lots;
2. The QBCC's decision made on 2 August 2017 to decline Mr Formosa's insurance claim under the Insurance Policy Conditions is set aside and substituted with the decision that:

Mr Formosa's insurance claim under the Insurance Policy Conditions is accepted in respect of the following defective works:

- (a) The pump out tank vent of the AES Enviro-Cycle Home Sewage Treatment Plant ('HSTP') at Lot 1, 27 Brookfield Drive, Sarina Beach, Queensland is located below ground-level;
 - (b) The nature and qualities of the soil in which the HSTPs at Lots 1 and 2, 27 Brookfield Drive, Sarina Beach, Queensland were installed is incompatible with the efficient and proper operation of the HSTPs; and
 - (c) Stormwater drainage and diversion at Lots 1 and 2, 27 Brookfield Drive, Sarina Beach, Queensland is inadequate for the efficient operation of the HSTPs on those Lots;
3. If either party wishes to seek costs:
- (a) The party seeking costs is to file in the Tribunal and give to the other party a clear description of the costs and orders sought, and submissions in support, by 4pm on 17 April 2020;
 - (b) The other party is to file in the Tribunal and give to the other party submissions in reply by 4pm on 1 May 2020; and
 - (c) The issue of costs will be determined on the papers not before 2 May 2020.