REPORT

on the

DEVELOPMENT AND ROLE OF THE MBIE GUIDANCE DOCUMENT ON HOUSE REPAIRS AND RECONSTRUCTION FOLLOWING THE CANTERBURY EARTHQUAKE

17 July 2019

Some parts of this document are not appropriate to release and, if requested, would be withheld under the Official Information Act 1982 (the OIA). Where this is the case, the relevant sections of the OIA that would apply have been identified.

INTRODUCTION AND SUMMARY

Scope

1. We have been asked by the Earthquake Commission ("**EQC**") to undertake a review of the development and implementation of the MBIE Guidance on House Repairs and Reconstructions Following the Canterbury Earthquake ("**MBIE Guidance Document**") issued by the Department of Building and Housing ("**DBH**") (later to become the Ministry of Business, Innovation and Employment ("**MBIE**")).

2. Our report addresses the following key questions:

   (a) What was the intended purpose of the MBIE Guidance Document?

   (b) What was EQC's role in the preparation of the MBIE Guidance Document, both before and after responsibility for the MBIE Guidance Document was transferred from EQC to MBIE in December 2010?

   (c) Did the MBIE Guidance Document correctly reflect the standard of repair required by the Earthquake Commission Act 1993 ("**EQC Act**")?

   (d) More generally, did EQC correctly understand the standard of repair required by the EQC Act?

   (e) To what extent has the MBIE Guidance Document been used to guide repairs?

3. We address each of these questions in turn.

Process

4. In preparing our report we have:

   (a) spoken to 14 relevant persons comprising key EQC present or former employees and contractors, and other relevant persons, as specified in our letter of 7 July 2019;

   (b) reviewed the key categories of documents relevant to the scope of our review specified in Appendix 1; and

   (c) selected 13 CHRP files for audit by a team of EQC technical advisors, to report as to: (a) whether the MBIE Guidance Document *controlled* repair standards; and (b) whether EQC repair works instructions met the EQC Act standard. (See paragraph 116 for the criteria for selecting these files. None of the audit team involved had any prior involvement with the properties they were responsible for auditing.)

Executive summary

Purposes of the MBIE Guidance Document

5. The intended purpose of the MBIE Guidance Document was to respond to the demand for a single guidance document that would facilitate consistent engineering approaches to unprecedented repair problems in the aftermath of the September 2010 Darfield earthquake.

6. In particular, the MBIE Guidance Document was intended to:

(a) enable the sharing of information about the impact of the September 2010 earthquake including the sharing of repair and reconstruction methodologies within the engineering and related sectors; and

(b) provide guidance (under the Building Act 2004) to relevant territorial authorities and other affected stakeholders as to repair options.

7. The MBIE Guidance Document was not intended to:

(a) set out EQC's (or MBIE's) views of the legal entitlements of homeowners under the Earthquake Commission Act 1993 ("**EQC Act**"); or

(b) act as a mechanism for controlling or reducing the cost of repair or reinstatement.

8. As more information became known, and Canterbury's earthquake sequence continued, the MBIE Guidance Document was updated and amended.

Role of EQC in preparing the MBIE Guidance Document

9. EQC was an instigator, and initial funder, of the working group known as the Engineering Advisory Group ("**EAG**"), which prepared the MBIE Guidance Document. EQC continued to have two representatives on the EAG but did not control the outcomes of the EAG's work and nor did its representatives provide input into the development of engineering standards.

Discussion of the statutory repair standard in the MBIE Guidance Document

10. To the limited extent that the statutory standard of repair was addressed in the initial version of the MBIE Guidance Document, confusing and contradictory language was used. That ambiguity did not have any significant influence on the understanding of EQC staff as to their repair obligations at the time.

11. The second version of the MBIE Guidance Document, which was published in 2011, removed these confusing and contradictory sentences. That version of the MBIE Guidance Document – and each subsequent iteration thereafter – accurately reflected the statutory repair standard.

EQC's focus on, and understanding of, the statutory repair standard more generally

12. At a more general level, EQC's focus on, and appreciation of, its repair standard obligations under the EQC Act improved over time.

13. Between 2010 and 2012, EQC (including, in particular, its personnel responsible for assessing claims) was principally focused on scoping and repairing earthquake damage. The training and reference materials from that time shared that focus. Little thought was given to the repair standard required by the EQC Act. We infer that EQC's focus as an organisation was on both the practical challenge of processing a high volume of claims, and the engineering challenge of responding to unprecedented levels, and unique types, of earthquake damage – not on the legal requirements of repairs.

14. Since the latter half of 2013, EQC has been more cognisant of the EQC Act's repair requirements. The witnesses we spoke to, and the materials we reviewed, evidence EQC's increased focus on, and better appreciation of, the EQC Act's repair standard after that date. That increased clarity came about as a result of improved internal knowledge, external input, and a number of relevant court decisions.

15. Several of the witnesses we spoke to, including representatives both from the EAG and from personnel involved in assessing claims, spoke of this improvement in EQC's understanding over time. It is reasonable to infer that this increased understanding would have led to greater consistency in the standard of repairs achieved. Viewed, at a high level, as a repairing "system", there is likely to have been a higher degree of variability in standards of repair achieved in repair works between 2010 and 2012, which was gradually replaced with a more consistent approach from mid-to-late 2013 onwards.

Use of MBIE Guidance Document to guide repairs

16. Given the scale of the task of assessing and repairing so many buildings, the MBIE Guidance Document was a useful tool for the purpose of assessing necessary repairs. Without guidance of that type, every engineer and stakeholder would have been left trying to arrive at individual engineering solutions for the broad range of issues facing property owners, leading to duplication, inconsistency and delay.

17. The evidence from those who worked in the field is that the MBIE Guidance Document was used as a tool for assessing necessary repairs. It was not used as a reference as to the correct standard of repair under the EQC Act. Our audit of repairs from the relevant time does not imply any substantial reliance on the MBIE Guidance Document in determining the repair standard required.

18. Our full list of conclusions are set out from paragraph 120 to 137 below.

FINDINGS

Purposes of the MBIE Guidance Document

19. The MBIE Guidance Document was first published on 20 December 2010.[1] The context for its creation was the aftermath of the 4 September 2010 "Darfield" earthquake, a magnitude 7.1 earthquake.

20. As at March 2010, EQC had 22 permanent staff located in one office in Wellington. It also had 23 trained assessors around the country. By early December 2010, approximately 160,000 earthquake insurance claims had been submitted to EQC. Of these, approximately 16,000 of the claims had a land component. The Darfield earthquake was therefore a "game changer" for the EQC, and for Canterbury.

21. At the time the MBIE Guidance Document was first created, there had only been one material earthquake – the 4 September 2010 "Darfield" earthquake. At that time, no one was (or could have been) considering the impact of the other major earthquakes in the Canterbury earthquake sequence.

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[1] The MBIE Guidance Document is a public resource. Every iteration has been made public as follows: (i) The first version was made public at a launch event in Christchurch on 20 December 2010 and was published on the DBH website. (ii) The second version was published by DBH on 9 December 2011 and was available for download on the DBH website or in hard copy from DBH and the Canterbury Councils. (iii) The third version was published in December 2012 in loose-leaf format to allow the guidance to be updated on a regular basis and an electronic version was published on the DBH website. (iv) Since December 2012, MBIE has published each subsequent update to the MBIE Guidance Document on the MBIE website. A full list of those updates detailing each of the amendments is available on the MBIE website. So too is the most up-to-date edition of the MBIE Guidance Document.

22. The Darfield earthquake was the first earthquake in New Zealand where widespread liquefaction and damage to land occurred. The relevant New Zealand Building Standard (NZS 3604) assumed, without defining, the existence of "good ground" at the time foundations are restored or repaired. There was therefore little to no experience of dealing with liquefaction or land damage and their effects on buildings.

23. In October 2010, the EAG was set up by EQC to respond to the perceived need for generalised engineering guidance in the aftermath of the Darfield earthquake. The make-up of the EAG is discussed from paragraph 33 below. The EAG met on numerous occasions between October and December 2010. Over the course of that period, the EAG prepared the first version of the MBIE Guidance Document.

24. The two key purposes of the MBIE Guidance Document were:

    (a) to enable the sharing of information about the impact of the Darfield earthquake, including (in particular) repair and reconstruction methodologies, among the engineering (and related) sectors; and

    (b) to provide guidance as to options for repair, as a regulatory function under the Building Act 2004, to the three relevant territorial authorities (Christchurch City, Waimakirira District and Selwyn District) and other affected stakeholders.

25. The first of these functions reflects EQC's statutory function as set out in section 51(e) of the EQC Act:

> The functions of the Commission are …
>
> (e) To facilitate research and education about matters relevant to natural disaster damage, methods of reducing or preventing natural disaster damage, and the insurance provided under this Act.

26. This is consistent with the purpose of the MBIE Guidance Document as summarised in the document itself. The front page of the MBIE Guidance Document stated that it is:

> A summary of geotechnical and structural engineering recommendations to guide house repairs and reconstruction.

27. The MBIE Guidance Document sought to avoid "reinventing the wheel" for every repair. Section 1.1 of the MBIE Guidance Document stated:

> The guidance aims to encourage consistency of approach and to avoid unnecessary and costly investigations and designs for each property. It takes a prudent approach that is mindful of costs and risks. It provides solutions in construction efforts that will meet the requirements of the Building Act and Building Code while avoiding "over design" and "over-investigation" where this is not warranted.

28. The above passage from the introduction to the MBIE Guidance Document also highlights that the MBIE Guidance Document was intended to fulfil the second key purpose above, by providing solutions and construction methods that would meet the territorial authorities' requirements under the Building Act and Building Code.

29. The MBIE Guidance Document was issued under s 175 of the Building Act, which provides:

> **175 Chief executive may publish guidance information**

> (1) The chief executive may publish information for the guidance of—
>
> (a) any of the following persons to assist them in complying with this Act:
>
> (i) territorial authorities:
>
> (ii) building consent authorities:
>
> (iii) owners:
>
> (iv) persons who carry out building work; and
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> (b) any of the following persons to assist them in the performance of their functions and duties, and in the exercise of their powers (if any), in relation to dams:
>
> (i) regional authorities:
>
> (ii) owners of dams:
>
> (iii) licensed building practitioners; and
>
> (c) owners of buildings and members of the public in relation to the application of subpart 6A of Part 2.
>
> (2) Any information published by the chief executive under this section—
>
> (a) is only a guide; and
>
> (b) if used, does not relieve any person of the obligation to consider any matter to which that information relates according to the circumstances of the particular case.

30. This is consistent with the MBIE Guidance Document's published intent to be a guide only. In section 1.1, it states:

> Following the methods or solutions proposed in the document is not mandatory. Different and improved details and methods may well be developed as the recovery proceeds. The earthquake and its effects are complex. Investigations into the full picture on how residential structures responded to liquefaction effects are ongoing. It may well be that some aspects of the recommendations of the document are added to or changed over time.

31. The MBIE Guidance Document was also intended by the EAG to provide guidelines for engineering solutions that would reduce the damage to homes in future earthquakes. This is how the MBIE Guidance Document has been used by the courts. In *CNS Kelly Properties Limited v EQC*, for example, the High Court said:[2]

> The intent of MBIE was to provide robust and well-balanced engineering solutions that will reduce the damage to homes in future earthquakes … while I accept the criteria are provided solely as an indicator … I find they are applicable and relevant in the current circumstance.

32. Likewise, in *O'Loughlin v Tower Insurance Limited*, the High Court observed:[3]

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2 *CNS Kelly Properties Limited v EQC* [2017] NZHC 1583 at [123].

3 *O'Loughlin v Tower Insurance Limited* [2013] NZHC 670 at [125].

> All of the engineers acknowledged the importance of the Guidance Document [the MBIE Guidance Document] … even though it is not technically a document where compliance was a requirement, the evidence that I have shows that it would be the most relevant guidance document.

Role of EQC in preparing the MBIE Guidance Document

33. As stated above, the MBIE Guidance Document was prepared by the EAG. EQC was an instigator, and initial funder, of the EAG. From a very early stage of the EAG's activities, the EAG agreed that any technical guidance document produced would be published by DBH. The formal transfer of stewardship of the EAG's work from EQC to DBH commenced on 8 November 2010 (as discussed at paragraph 41 below).

34. There were 12 initial members of the EAG, two of whom were EQC employees, and two of whom were EQC's engineers. The EAG's initial members are set out in Appendix 2. The Terms of Reference for the EAG are attached as Appendix 3. The group included structural and geotechnical experts from DBH, BRANZ[4], and other structural engineering, earthquake engineering and geotechnical societies. Given the absence of any substantial New Zealand experience in liquefaction, the EAG also sought input from international experts experienced in the effects of liquefaction on buildings.

35. The EAG reported to EQC's Research Manager, Hugh Cowan. It was chaired and managed by Dave Brunsdon, of the Kestrel Group (who was engaged by EQC).

36. The initial members of the EAG, with the exception of the two EQC representatives referred to in paragraph 37 below, were selected on the basis that they were considered by the Chair of the EAG, and the Chief Engineer of DBH, to be qualified and experienced engineers, who had demonstrated the ability to work as a team and solve problems. Tonkin & Taylor (who had two representatives on the EAG) were EQC's engineers. Tonkin & Taylor had been involved in conducting field trials and gathering information on the impact of the Darfield earthquake.

37. The two appointees from EQC on the EAG were George Hooper and Pat Moynihan. Mr Hooper was a former commissioner of EQC. Mr Moynihan was an experienced loss adjuster. The two EQC appointees did not provide input into the development of engineering standards. EQC did not control the EAG, in the sense of directing the outcome of its work. Nonetheless, if the EQC's engineers (Tonkin & Taylor) are included in calculations, there were four EQC representatives on the EAG, and, in its initial stages, the EAG's other members were paid for their involvement by EQC.

38. Homeowner representatives were not included on the EAG, and were not considered for inclusion by the initial members of the EAG. Representatives of private insurers and local authorities were also not included on the EAG. As the MBIE Guidance Document was a technical document, drafted by technical experts, we would not criticise the EAG for not involving stakeholder representatives in the technical development of the proposed repair solutions.

39. However, in the course of creating the various iterations of the MBIE Guidance Document, the EAG did meet with groups of insurers, and territorial authorities. The purpose of these meetings was to ensure that the commercial implications of the solutions being proposed

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4 BRANZ (Building Research Association of New Zealand) is an independent research organisation providing advice and services to the building industry.

(including implications on insurance provisions, and the future insurability of buildings in Canterbury) were understood; and to identify any issues raised by insurers or territorial authorities. By contrast, no such consultation meetings were held with homeowners. At that time (October to December 2010), in the immediate aftermath of the Darfield earthquake, the representation of homeowners was less organised than it is now. Nonetheless, some input from representatives of the very people EQC serves should have been sought by the EAG. Meetings with homeowners should have been held to ensure that these stakeholders also understood the implications of the solutions being proposed, and to identify any issues affecting homeowners specifically.

40. Further, with hindsight, and as has been subsequently proffered by the Chair of the EAG, it would have been better to have separated the governance and technical functions of the EAG. The EAG, itself, should have been a purely technical group involving only engineers. The governance of the EAG should have been separate – and might have included representatives of EQC, DBH, insurers, territorial authorities, and homeowners.

41. The "stewardship" of the EAG was transferred to MBIE on or about 8 November 2010. The letter recording that transfer is attached as Appendix 4 (and this attached the then draft terms of reference. Those did not vary at all from the final terms of reference). The reason for this transfer was that guidance of this nature, pursuant to s 175 of the Building Act 2004, could only be published by MBIE (then DBH), and not EQC.

The repair standard in the MBIE Guidance Document

42. In late 2010, EQC decided to undertake the managed repair of earthquake damaged properties. This policy became the Canterbury Home Repair Programme ("**CHRP**"). Previously, EQC's usual approach had been to cash settle claims.

43. The EQC Act provides insurance against natural disaster damage for covered residential buildings for their "replacement value".[5] The replacement value of a residential building means the costs reasonably incurred in "replacing or reinstating the building to a condition substantially the same as but not better or more extensive than its condition **when new**".[6] CHRP should therefore have been aiming to carry out repairs to a "when new" standard.

44. Each version of the MBIE Guidance Document published has included a section outlining relevant insurance and regulatory requirements. Addressing these matters, section 2.1 of the first iteration of the MBIE Guidance Document (published on 20 December 2010) stated:

> The relevant provisions of the EQC Act generally mean that "like for like" entitles the claimant to have their dwelling repaired fully to its pre-earthquake condition. To borrow the words in the EQC Act, repairs should restore the building to "substantially the same" as its condition when new, unless circumstances do not permit full reinstatement or the cost of an as new replacement.

45. There is a contradiction between the first and second sentences of the paragraph above. The first sentence speaks of repair to a pre-earthquake condition. The second sentence paraphrases the "when new" EQC Act standard. This inconsistency created the potential for confusion.

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5 EQC Act, s 18.

6 EQC Act, s 2 (emphasis added).

46. However, we have concluded that this contradictory paragraph in the 2010 version of the MBIE Guidance Document had no significant influence on the understanding of EQC personnel involved in assessing claims as to the correct repair standard under the EQC Act. This is for the following reasons:

(a) The repair standard was not addressed at any length in the MBIE Guidance Document.

(b) None of the personnel we spoke to suggested that they referred to the MBIE Guidance Document for their understanding of the correct repair standard under the EQC Act. EQC personnel involved in assessing claims used the MBIE Guidance Document as a tool for assessing necessary repairs (for example, in relation to sloping floor levels, or for designing engineering repair strategies) but no one we spoke to suggested that EQC personnel used the MBIE Guidance Document as a reference for the standard of repair required under the EQC Act.

(c) The passage dealing with the standard of repair was updated in the second edition of the MBIE Guidance Document in December 2011. However, we saw no evidence that this resulted in any immediate change of approach or understanding of the EQC claims assessors as to that standard. If the MBIE Guidance Document was a significant factor in determining the assessors' appreciation of the standard, we would have expected to see evidence of a change in approach from the second edition onwards.

(d) The files reviewed as part of the audit exercise undertaken involving assessments and repairs from 2010 – 2012 included minimal reference to or reliance on the MBIE Guidance Document.

47. Further, and for the avoidance of doubt, we have seen no evidence of any deliberate attempt by EQC to use the MBIE Guidance Document to cut costs or minimise EQC's customers' legal entitlements. Indeed, the evidence we have seen is inconsistent with this intention.

48. The second iteration of the MBIE Guidance Document was published in December 2011. That version did not include the contradictory sentences set out at paragraph 44 above. The corresponding section of the document stated:

> …EQC may, at its option (instead of paying the amount of the damage), replace or reinstate the building to a condition substantially the same as, but not better or more extensive than, the building's condition when new…
>
> …the EQC Act definition of 'replacement value' provides that, where EQC options to replace or reinstate, repair work will return a dwelling to a condition 'substantially the same as' its condition when new, but not better or more extensive. EQC is not required to replace or reinstate exactly or completely, but only as the circumstances permit and in a 'reasonably sufficient manner'.

49. These observations accurately reflect the repair standard required by the EQC Act. Similarly, each subsequent iteration of the MBIE Guidance Document has correctly represented the statutory standard of repair.

EQC's attention to, and understanding of, the statutory repair standard generally

50. There is a broader question as to whether EQC generally understood its statutory repair obligations (whatever may have been reflected in the MBIE Guidance Document). Our

conclusion is that EQC's understanding and application of the "when new" standard of repair evolved over time. The evidence from witnesses and early training documentation is that, in the initial aftermath of the Canterbury earthquake sequence, EQC's focus on the "when new" standard was not as clear or consistent as it is now. It is reasonable to infer that during this period, the standard of repairs performed may consequently have been more variable and inconsistent.

51. The absence of a clear and certain focus on the repair standard in the initial aftermath of the earthquake sequence is unsurprising. EQC, as an organisation, was accustomed to cash settling earthquake damage claims. The managed repair programme was a new venture. Further, the nuance of the repair standard would only have been of determinative importance for a (presumably) small category of repairs. In many cases where it was obvious total replacement of damaged property was needed, repairs by way of replacement would achieve the "when new" threshold even without reference to the EQC Act repair standard. Only where there was a practical difference between repair to the "pre-earthquake condition" and to the "when new" standard (ie, at the margins) would the specific repair standard matter.

52. We have concluded that, over time, EQC's attention to, and appreciation of, the statutory repair standard improved significantly. This is reflected in the witnesses' evidence, EQC's training materials, the legal advice received, internal correspondence, and EQC's public statements. As a result, EQC's understanding of the EQC Act standard of repair evolved from being variable and inconsistent to becoming settled, accurate and clear. We infer that this evolution will have resulted in repairs more consistently performed to the statutory repair standard.

2010 – 2012

53. In the initial aftermath of the Canterbury earthquake sequence, EQC's focus was primarily on the practical challenges associated with processing approximately 160,000 earthquake insurance claims, and the demands of the construction and engineering response, rather than on the specific legal requirements of the "when new" repair standard. However, EQC had received a two-page legal opinion in October 2010 that set out the implications of the "when new" requirement, so we would not suggest that all individuals within EQC were unaware of the statutory obligations. As a whole, however, the evidence suggests that this knowledge was not widely held.

Witness interviews

54. The operational witnesses we spoke to explained that, while EQC staff understood repair works would be required to be effective, there was little attention given to the EQC Act's designated "when new" repair requirement in these early years. These witnesses had extensive experience with EQC, holding roles in structural engineering, operational advice, and technical response management capacities. Their evidence was that the prevailing understanding of relevant operational teams was that EQC's obligation was to perform a "proper repair" of damaged dwellings. We were told that EQC personnel understood in 2010 that repair work had to be compliant with the Building Code, had to be effective and had to meet a "workman-like standard".

55. One witness explained that the priority for EQC personnel was the performance of functioning, correct repairs; the specific legal requirements of the repair standard attracted little attention. In the initial aftermath of the Canterbury earthquakes, the efforts of relevant EQC personnel were directed to effective observation and repair of physical damage in

residential buildings, rather than conscious consideration of the statutory repair standard. Asked about his experiences working for EQC in late 2010, one witness told us:

> The standard [of repair] wasn't ever really discussed. I don't think we would have understood the technicalities. If a house was earthquake-damaged, the intended repair would just address the earthquake damage… There wasn't the same focus on the particular details of the EQC Act [at that time]. The focus was on fixing earthquake damage.[7]

56. The witnesses we spoke to referred to a number of other practical guidance documents that were relied upon by assessors, estimators and builders responding to earthquake damage. None of these were focused on the statutory standard of repair. One such document was the Earthquake Damage Assessment Catalogue ("**EDAC**"). The EDAC, which is put together by BRANZ, contains approximately 900 different damage options and repair strategies. We were told that the EDAC was considered to contain "just about everything you could ask for". The use of such materials, we infer, would have promoted consistency of building repair strategies and standards across the repair programme. However, it would not have ensured a consistent implementation of the statutory "when new" standard.

Training materials

57. We have seen a number of EQC training materials from 2010 – 2012. These materials placed little or no emphasis on the repair standard. For example:

(a) We have seen an EQC PowerPoint presentation entitled "Covered/Not Covered", created in 2012. This training was concerned with the scope of insurance cover under the EQC Act. It considered, for example, the circumstances in which damage to swimming pools would be covered. The presentation said nothing about the standard to which repairs were to be performed.

(b) We have also seen a document headed EQC Legal Guidelines for Assessing Claims, dated December 2012. These guidelines were prepared to provide "a general summary of common legal issues". The document is in the form of an encyclopaedia, dealing with particular issues arising in alphabetical order (eg access, building under construction, caravans). The guidelines said nothing about the standard to which repairs were to be performed.

Correspondence and advice received

58. Of note, in considering the awareness of the statutory repair standard amongst EQC personnel in the initial aftermath of the Canterbury earthquakes, is an email chain we have seen between various EQC personnel on 4 October 2010. In that chain, one EQC representative wrote of the repair standard as follows:

> The standing instruction is… that the risk (from a structural perspective) shall be no worse than the pre-loss state. As for reinstatement as new – I will make sure we also pick that construct up, but probably applies to the actual finish of the repairs, as well as determining the maximum value of the repairs. Clearly where there is remediation the engineering solution may well differ from that typically applied for "new" construction.

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7 The authors' verbatim note of the conversation.

59. A different EQC representative replied to this author, and was clear that the Act's replacement value repair standard was stricter than the "pre-loss state" standard suggested by the original author. This exchange demonstrates that, at the time, the statutory repair standard was not universally understood within EQC.

60. Shortly after this email exchange, on 13 October 2010, EQC obtained a two-page legal opinion on the question of its reinstatement obligations from Chapman Tripp. That opinion, which was provided to EQC's National Case Manager at the time, was clear that:

(a) EQC must reinstate damaged residential buildings to a condition substantially the same as, but not better or more extensive than, the condition of the building when new – so far as circumstances permit and provided the costs are reasonably incurred; and

(b) if circumstances do not permit, or the costs of the "when new" replacement are not reasonable, EQC is not obliged to replace or reinstate exactly or completely but only as the circumstances do permit and in a reasonably sufficient manner.

61. s9(2)(h)

2013 – present

62. It was, of course, necessary for EQC not only to be correctly advised on the matter, but also to disseminate and reinforce that advice. The evidence suggests that it was not until the second half of 2013 that EQC held widespread organisational knowledge of the statutory repair standard.

63. This is underscored by an EQC Board Paper dated 2 May 2013. It was prepared by s9(2)(a) s9(2)(a) (CHRP Manager) and s9(2)(a) (Business Services Manger). It was entitled "CHRP Review" Proposals for Change". In that context, the paper set out the objectives for CHRP, one of which was "Quality". Under that heading, the paper stated:

> All repairs are to result in no less (and no more) than the legal standard EQC is obliged to reach i.e. that the homeowner is restored to the position that existed before the event.

64. This statement arguably understates the repair standard required under the EQC Act. It suggests to us that if the authors had read and understood the various legal advice received on the subject, they did not have that advice in the front of their minds when preparing this paper.

65. A similar view of EQC's understanding of the statutory repair standard prior to 2013 was reached by the Office of the Auditor-General in an October 2013 audit entitled "Earthquake Commission: Managing the Canterbury Home Repair Programme". There, the Auditor-General found:

> **An expectation gap between EQC and homeowners**
>
> The Act states that EQC can pay out funds only for the purposes of replacing or reinstating a house to a condition that is substantially the same as, but not better or more extensive than, its condition when new. EQC describes this as a "like-for-like basis". EQC's application of the Act has been the subject of differences of opinion between it and homeowners, resulting in an expectation

> gap. The Act also states that EQC "shall not be bound to replace or reinstate exactly or completely but only as circumstances permit and in a reasonably sufficient manner… Part of the expectation gap stems from different interpretations of the standard of repair required under the Act.

66. Since 2013, EQC's understanding of the statutory repair standard has evolved to become more certain, consistent and widely held within the organisation. This is reflected in various EQC materials we have seen and, we understand, was prompted at least to some extent by case law developments.

Training materials

67. We have seen a set of training notes titled "EQC Canterbury Weathertight Training Notes". This training was given to EQC assessors and estimators. The training notes document was created (and last modified) on 18 September 2013. The notes include the following passage:

> **What is the repair standard?**
>
> EQC's liability is for the "costs which would reasonably be incurred in respect of … replacing or reinstating the building to a condition substantially the same as but not better or more extensive than its condition when new, modified as necessary to comply with any applicable laws". (Definition of "replacement value", EQC Act)
>
> However, EQC is not liable to reinstate (or to pay to reinstate) exactly or completely, but only as circumstances permit and in a reasonably sufficient manner. This leaves some flexibility where there are design issues or other pre-existing defects complicating repairs. (Paragraph 9, schedule 3, EQC Act).
>
> The "when new" language generally requires EQC to reinstate or replace a building to a condition that is substantially the same as the condition in which that particular building was when it was new. That standard is modified by cl 9(1) of Schedule 3 of the EQC Act so that EQC is not obliged to reinstate exactly or completely but only as circumstances permit and in a reasonably sufficient manner.
>
> Overall, the standard is likely to be interpreted to require repairs to be of the same style and quality of materials as the insured property when new, but allowing reasonable substitution of materials or methods of construction where that would not affect the quality or character of the replacement works.

68. Similarly, we have seen PowerPoint slides of a training headed 'Pre-existing Building and Design Issues Legislative Framework'.[8] We understand this training was given by EQC personnel to EQC's external engineer panel on 28 November 2013.

69. These slides directly address the repair standard required under the EQC Act. Slides 7-10 are particularly relevant and are set out below:

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[8] v0.4 and v0.6.

What Standard Does EQC Repair To?

- Must be lawful repair
    - Building **work** must comply with Building Code
    - Multi-unit/storey buildings may need fire upgrade.
- Building (as a whole) must continue to comply with Building Code to the same extent as before repairs.

(Slide 7)

Replacement value defined

…

(ii) replacing or reinstating the building to a condition substantially the same as but not better or more extensive than its condition when new, modified as necessary to comply with any applicable laws; and … [original text, large font and bold]

(Slide 8)

Myth Busting

Q Is "***betterment***" allowed?

A Replacement Value standard means you always get "***new for old***".

(Slide 9)

Myth Busting

Q Does EQC return to the condition of "***the day before***" the earthquake?

A Primary obligation to replace or reinstate to "substantially the same as…when new" (replacement value definition)

Qualified by (clause 9 Schedule 3):

- Not ***required*** to be exactly or completely;
- Only as circumstances permit; but
- **Must be** "reasonably sufficient"

Practical result ***may*** be that repair returns building to condition "***the day before the earthquake***" in some cases – but ***that is not the test***.

(Slide 10)

70. As appears from the above, slides 9 and 10 were concerned with betterment and the correct standard of repair. The fact that they were put in terms of "myth busting" may suggest that some personnel had not previously understood the correct standard, or how to approach the issue of betterment. However, the discussion of repair standard in these slides directly and correctly addresses the statutory requirement. In particular, this training was clear that:

(a) the possibility of betterment was irrelevant to the application of the "when new" repair standard; and

(b) the standard required was a "when new" standard, rather than a pre-earthquake condition standard.

71. Some of the training in this period was less precise on the repair standard required. We have seen a set of PowerPoint slides prepared by Fletcher which appear to have been created in June 2013, but was re-dated May 2014, suggesting that it (or a version of it) was used over an extended period. The training is headed "Compliance Framework For Repairs to Earthquake Damaged Properties". Fletcher acted as EQC's agent in project managing CHRP. As such Fletcher's understanding of the statutory repair standard is of relevance.

72. The slides included the following:

> THE BASICS – EQC's OBLIGATIONS
>
> **Replacement or Reinstatement** is defined as –
>
> > Replacing or reinstating the building to a condition "**substantially the same as but not better or more extensive than its condition when new, modified as necessary to comply with any applicable laws**"; eg Building Act 2004.
>
> **OFTEN CALLED "LIKE FOR LIKE" REPLACEMENT.** (Original emphasis)

73. The final (capitalised and bold) words reflect the conclusions of the Auditor General, in describing the repair standard as "like-for-like". This is not the language of the EQC Act, and arguably describes a lesser standard than the "when new" standard set out there.

74. Similarly, the Fletcher EQR "Technical Hub Red Book", dated October 2013, described the primary aim of re-levelling a floor as being "to return the floor to its pre-earthquake state".

75. However, later materials accurately reflected the statutory standard. We have seen an EQC training PowerPoint headed 'EQC Act Train the Trainer', dated November and December 2016. The purpose of the presentation was to "provide some private insurer personnel with a high level introduction to the EQC Act". It addressed "Replacement Value" and, in that context, correctly quoted the "when new" standard under the EQC Act.

76. We have also seen an EQC training PowerPoint headed 'Assessing and settling earthquake damage claims for residential buildings'. The document was created in July 2017. It is a version of what is known within EQC as "traffic light training" (as the slides make use of red, amber and green colours).

77. We understand this training was given widely from around 2015. The traffic light training was initially provided to EQR engineers (as they were dealing with some of the more complex issues, such as properties with pre-existing floor level issues, where there was a question as to how far the repairs had to go in terms of re-levelling the floors). The training was then provided to EQC staff (estimators and assessors and in-house engineers). It has since been provided regularly.

78. As with the 2013 slides described above, this training was directly focused on the standard of repair required under the EQC Act. Three slides are particularly relevant. These provide:

> **Devising a repair strategy that complies with the EQC ACT (cont.)**
>
> - Definition of replacement value in the EQC Act
>
> ○ Section 2(1) EQC Act:
>
> ***replacement value means –***

a) *in relation to a residential building, any costs which would be reasonably incurred in respect of –*

…

ii. *replacing or reinstating the building to a condition substantially the same as but not better or more extensive than its condition when new, modified as necessary to comply with any applicable laws; and*

…

(Slide 1)

Devising a repair strategy that complies with the EQC ACT (cont.)

- What does "when new" mean?
  - Standard requires earthquake damaged element to be put back as nearly as possible to same condition as when new
  - End product must be comparable to original element when was new, in size, functionality, quality, character and appearance
  - Original building materials no longer available?
  - Changes to building law since residential building was built?

(Slide 2)

Devising a repair strategy that complies with the EQC ACT (cont.)

- Situation where reinstatement or replacement requires doing work on undamaged property
  - Sometimes in order to replace or reinstate a damaged building element, it will be necessary to do work on an undamaged part of the residential building
  - In these circumstances, EQC insurance includes:
  - Cost of work on undamaged part of residential building necessary to carry out repair;
  - Cost of reinstating the undamaged part *if* it was damaged in the course of the work being done on it; and
  - Cost of modifying the undamaged part, if any laws require the undamaged part to be modified as a result of work being done on it
  - Will depend on the circumstances for each case.

(Slide 3)

79. This training reflects EQC's improved understanding of the specific meaning and practical requirements of the "when new" standard in the repair context.

Influence of court decisions

80. From 2013 onwards, the courts determined a number of earthquake cases concerning the standard of repair works. There was a succession of judgments, both under the EQC Act and under private insurance policies, which addressed the standard to which repairs were to be undertaken. For example:

(a) *O'Loughlin v Tower Insurance Ltd* [2013] NZHC 670, construing the obligations under a policy which required the insurer to make payment on the basis of rebuilding the damaged property "as new";

(b) *East v Medical Assurance Society New Zealand Limited* [2014] NZHC 3399, construing a policy which required assessment to be made on the basis that the damaged property was restored to a condition substantially the same as new; and

(c) *Parkin v Vero Insurance New Zealand Ltd* [2015] NZHC 1675, concerning a policy which covered the cost of repairing “to a standard of specification no more extensive, nor better than its condition when new".

81. Two of the EQC personnel we interviewed said that such court decisions were of interest to EQC personnel assessing claims. The judgments were discussed by the claims assessors and resulted in greater clarity as to the standard of repairs to which they were working.

Advice received

82. During this period, EQC was continuing to take legal advice on these matters from Chapman Tripp. In August 2015, Chapman Tripp issued an EQC Guidance Note headed 'Settling earthquake damage claims for residential buildings – Canterbury earthquakes' (the "**Note**"). The Note's purpose was to "assist discussions between EQC legal and EQC managers and assessors on the two fundamental aspects of settling residential building damage claims under the EQC Act – identifying earthquake damage (part 1) and devising repair strategies that comply with the EQC Act (part 2)".

83. There are two aspects to the Note which are of relevance to the respects in which EQC's thinking had evolved since 2010.

84. One aspect was EQC's greater focus on and understanding of the statutory repair standard generally. Part 2 of this Note addressed this general question, and the standard to which repairs were to be performed under the EQC Act. The Note states that:

> EQC needs to apply established legal principles to meet the "*as when new*" standard on the facts of each situation.
>
> The legal principles are drawn from case law dealing with similar insurance policy standards. The general principles are as follows:
>
> 9.1 The "*as when new*" standard generally requires the earthquake damaged element to be put back as nearly as possible to the same condition as it was when it was new.
>
> 9.2 Key determining factors in identifying what the "*as when new*" standard requires include – size, functionality, relative quality and reasonably addressing the recreation of the character and appearance of the residential building.

> 9.3 "*As when new*" does not mean reinstating the damage exactly as if you were building the house at its original date of construction. It is about reinstating the damaged components to an as when new condition in terms of functionality and quality, including aesthetics (where relevant). Reasonable substitution of materials or methods of construction are allowed where that would not affect the quality or character of the building and in recognition that some technologies (such as relating to electrical fittings) have changed.

85. Second, and consistent with some of the training materials of the time, the Note was also concerned with the concept of "betterment". It stated:

> 12 The concept of "betterment" is effectively irrelevant to the decisions that EQC needs to make in meeting its insurance obligations. It is preferable not to refer to betterment at all.
>
> 13. In general insurance law betterment is used in different ways, each with different consequences in terms of insurance cover. For example, "replacement value" insurance will usually involve some element of betterment. This is because the insured is getting new components in substitution for old components. There will also be a legitimate betterment to the extent that any upgrade to a building is required to comply with applicable laws for the replacement or reinstatement of the damaged element of a building.

86. The fact that this advice was sought may imply that EQC was concerned that its personnel's understanding of these matters was not as developed as it should be. Further, we infer that this was considered important advice by EQC, as both these elements were reflected in the widely given traffic light training referred to above.

87. In any event, after the Note was issued, and the training devised in light of it, any variability in the EQC-system of assessing repairs is likely to have been much reduced or eliminated.

The practical application of the "when new" standard.

88. As part of the evolution of EQC's understanding of the statutory "when new" standard, EQC came to confront difficult questions as to how, practically, it is applied.

89. For example, many of the properties repaired in Canterbury were villas built in the early 20th century. Parts of the property may have been modified much more recently. When repairing earthquake damage was the part to be reinstated to when the villa was first built, or to the time of its modification?

90. This issue was identified and addressed in a number of the documents we reviewed.

91. It was raised to some extent in the 2013 'Pre-existing Building and Design Issues' document referred to at paragraph 67 above. The slides concluded with the following, practical example:

> **Consider Foundation Damage**
>
> - Level When new
> - -80mm Pre earthquake

- -100mm Post earthquake
- EQC Repair Re-level house… "not exactly, but only as circumstances permit and in reasonably sufficient manner"

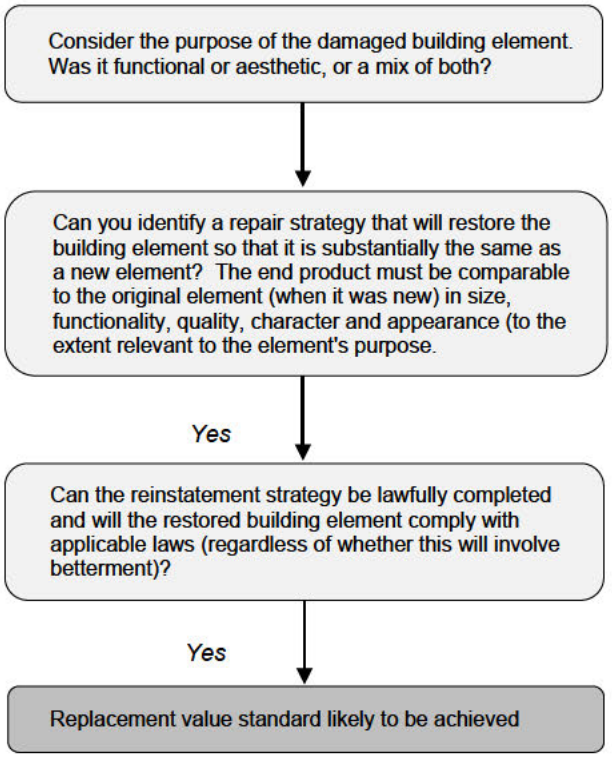
(slide 11)

92. This slide may have identified the issue, but it did not give a conclusive answer.

93. The issue was addressed more fully in the 2015 Note. As appears from paragraph 84 above, paragraph 9.3 of the Note touched on this issue. The Note then expanded on it, with reference to the *Parkin* case. The Note went on to give guidance confronting the practical application of the "when new" standard. It advised EQC to have regard to the purpose or function of the part of the house requiring repair; and to approach the question more holistically than simply thinking in terms of replacing the damaged item with a new item.

94. This aspect of the "when new" repair standard was recently analysed by the High Court. In *Fitzgerald v IAG New Zealand Limited* [2018] NZHC 3447 the Court construed a home insurance policy, which required the insurer to repair the house to a "condition as similar as possible to when it was new, using current materials and methods". The High Court acknowledged that a "when it was new" insurance policy standard "must be impacted by the state of the house when it was first built". Such a "temporal standard", the Court said, "does not mean the repairs must produce an exact replica of the original house. Modern materials may be used. Rather, the repairs must put the house in the same position as far as possible as it originally was". In this respect, the Court's decision confirms the accuracy of EQC's approach set out in paragraph 9.3 of the Note.

95. Finally, questions as to the practical application of the statutory standard were addressed in EQC's traffic light training. The 2017 slides end with the following:



96. In summary, EQC's better appreciation of its statutory repair standard included an important practical element.

MBIE publications

97. Improvements in EQC's understanding of the statutory repair standard are underscored by two documents MBIE published in 2016, namely:

(a) the "Clarification of the role of MBIE residential guidance homeowner insurance policies" statement in January 2016; and

(b) the joint statement issued by the EQC Action Group[9] and EQC in April 2016.

98. The January 2016 document states, in particular, that:

> The [MBIE Guidance Document] provides technical solutions that comply with the Building Act and Building Code. It is not a substitute for the policy homeowners have with their insurer, which will take precedence. The Ministry's guidance provides good practice repair solutions, but does not address insurance entitlement. Entitlements provided by the insurers' policies may be greater than or equal to the repair and rebuild solutions provided by the MBIE guidance depending on the wording of the individual policies.

99. The April 2016 joint statement by EQC Action Group and EQC states, in particular, that:

> One of the concerns of the Action Group was that the Commission may have considered that the insurance under the Act was limited to reinstating an earthquake-damaged house to the same condition that it was in just prior to the earthquakes. The Commission confirms that the insurance under the Act insures houses for replacement value, which includes the cost to reinstate a house to substantially the same as (but not better or more extensive than) its condition “when new” and the cost of complying with any applicable laws. The Commission says that this has always been its position.

100. We were told that the joint statement was intended to address concerns of the EQC Action Group that the MBIE Guidance Document was being used as the sole basis for assessing settlements. There is no evidence from any of the EQC personnel we spoke to that this was their practice. In any event, the joint statement made it as clear as it could be what EQC's understanding of the repair standard was – and reflects EQC's improved appreciation of that standard.

Use of MBIE Guidance Document to guide repairs

101. In this section of the report, we consider the extent to which the MBIE Guidance Document has been used to guide repairs.

102. The MBIE Guidance Document contains a range of technical engineering solutions and guidelines, which bear on the repair outcomes to be achieved. It is outside the scope of this report to consider each of these repair strategies in detail. However, the guidance relating to

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9 The EQC Action Group is a group of owners of houses that were damaged by the Canterbury earthquakes in 2010 and 2011.

re-establishing floor levels has received some focus, and is illustrative of the difficulties in relying solely on the MBIE Guidance Document to guide repairs.

103. The MBIE Guidance Document, as first published in 2010, included a table 4.1, which provided guidance as to whether various types of residential property needed to have flooring re-levelled, with reference to the degree to which the floor sloped. None of the EQC personnel we spoke to suggested that they assessed claims by a rigid application of these guidelines: either in terms of assessing earthquake damage, or the standard to which repairs were to be carried out. However, we were told by a senior member of the EAG that the possibility this may have been occurring, within EQC or otherwise, became a matter of concern.

104. If such a rigid application of the guidance was occurring, it was occurring *despite*, not *because of*, the wording in the MBIE Guidance Document. From the first (2010) edition onwards, the MBIE Guidance made it clear that the table "repair/rebuild categories and criteria" is intended to provide guidance only. The 2010 edition of the MBIE Guidance Document stated: "the criteria in Table 4.1 are to provide guidance, rather than representing absolute criteria". All subsequent editions of the MBIE Guidance Document had similar wording.

105. EQC took further steps to address any misapplication of this guidance. Both the 2013 and 2017 training materials referred to above specifically addressed the requirements as regards the expected flooring levels after repairs.

106. The 2013 training included the slide addressing floor levels quoted at paragraph 91 above.

107. The issue was addressed in the Chapman Tripp Note of 2015. With reference to floor levels, the Note made it clear that the MBIE Guidance Document did "not provide a definitive standard and therefore are not "applicable laws"". It suggested that the floor levels provided for in the MBIE Guidance Document may, however, be relevant for determining whether the repair has been "reasonably sufficient" in the circumstances.

108. Further, the 2017 traffic light training included a slide stating:

> **Devising a repair strategy that complies with the EQC Act (cont.)**
>
> …
>
> - If a residential building has suffered earthquake damage that includes the floor being out of level:
> - Fact that floor level is within MBIE guidance criteria is not sufficient reason for EQC insurance not to cover relevelling of the floor; and
> - If the EQC insurance covers the relevelling, the relevelling required is determined by the EQC Act (on the basis of replacement value standard) not MBIE guidance criteria.

109. The 2016 joint statement echoed this training, stating:

> The parties agree that if a house has suffered earthquake damage that includes the floor being out of level:

- The fact that the floor level is within the MBIE Guidance criteria is not a sufficient reason for the insurance under the Act not to cover the relevelling of the floor; and

- If the insurance covers the relevelling of the floor, the relevelling required is determined by the Act, not by the MBIE Guidance criteria.

110. These slides, internal advice and public statements demonstrate EQC's understanding that it is the repair standard under the EQC Act, not the MBIE Guidance Document, which determines the standard of repairs required. Each comment above refers to the relevant standard in slightly different terms. However, these differences reflect the fact-sensitive nature of applying the "when new" standard to damaged floors.

111. This is reflected in decisions reached by the courts. In addressing the insurer's obligations with regard to providing a level foundation, in the *Fitzgerald* decision, the High Court said:[10]

> I repeat that in the present case the Policy specifically requires that the plaintiffs' house is to be restored to a condition as similar as possible to when it was new. With regard to the foundations particularly, this means that those foundations must provide the same level of functional support to the building as when they were new. There is no *prima facie* obligation on IAG to ensure that the foundations are at the same level as modern standards, although modern materials and methods are to be used to bring the foundations back up to their original standard.

112. This case illustrates how applying the statutory standard to determine the appropriate level of a repaired floor is not a straightforward exercise.

113. The 2016 joint statement, discussed above, addressed a concern that the MBIE Guidance Document was being applied as the controlling document by EQC claims assessors. We have not been able to establish conclusively how widespread any such issue was, in fact. However, in the absence of clarity in the first edition of the MBIE Guidance Document or training materials as the correct standard of repair, it may have been inevitable that some EQC personnel would resort to the MBIE Guidance Document as controlling the standard of repair.

114. However widespread this issue was in the period from 2010 to 2011, when the MBIE Guidance Document was clarified to correctly state the EQC Act repair standard in 2011 the risk was substantially reduced. By 2013, the risk was comprehensively addressed by EQC in its training and, even more so, by its "Clarification of the role of MBIE residential guidance homeowner insurance policies" in January 2016, as well as the April 2016 joint statement.

115. Setting aside the MBIE Guidance Document or training materials for the moment, we also considered what repair standards were in fact being instructed. We did so by way of an audit exercise of thirteen repair cases, with the assistance of a qualified building surveyor and a team of EQC technical advisors.[11]

116. 13 CHRP files were selected for audit. The criteria for selection were:

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10 *Fitzgerald v IAG New Zealand Limited* [2018] NZHC 3447 at [29].

11 None of the audit team involved had any prior involvement with the properties they were responsible for auditing.

(a) Each file had to contain instructions as to the repairs to be performed (ie, a scope of works) – so that we could review whether the repair works instructed by EQC in each instance met the EQC Act's standard.

(b) The audit properties were chosen to represent a range of situations including some purely cosmetic repairs and others with internal damage. Some of the properties in question had only been repaired once. Others had been the subject of subsequent EQC repair works.

(c) The repairs in question were carried out between 2012 and 2016.

117. A summary of the results is below:

Repairs instructed[12]	No. of files	Result
2011	1	EQC Act standard met
2012	4	EQC Act standard met for three repairs; other repair more difficult to assess but likely that standard not met
2013	3	EQC Act standard met for all three repairs
2014	3	EQC Act standard met for all three repairs
2015	2	EQC Act standard met for one repair; other repair more difficult to assess but likely that standard not met

118. The audit team's view, in the time they had to consider the files, is that, in 11 of the 13 CHRP files examined, the repair strategies instructed were clearly sufficient to meet the "when new" replacement standard defined by the EQC Act.

119. In two of the 13 CHRP files examined, the reviewers considered that the repair strategies intended to re-level earthquake-damaged floors probably did not met the replacement standard. However, the audit team described this as a genuinely "grey area" that would turn on the application of the "when new" standard across properties constructed in different eras.[13]

120. The auditors considered that the two "grey area" repairs (instructed in 2011 and 2015) probably did not meet the statutory repair standard because the repaired floor levels were significantly out of level (by 75mm over 7.5m and 80mm respectively). There could have been an issue with the properties, meaning that this variance could not be reduced, but the auditors were unable to tell on the basis of the files. We have seen no evidence that the MBIE Guidance Document influenced these outcomes.

Conclusions

121. The purposes of the MBIE Guidance Document were:

(a) to share information with a view to creating geotechnical and structural engineering recommendations to guide house repairs and recommendations; and

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12 This is the year in which it appears Fletcher EQR instructed the work order for the repairs.

13 We note the High Court's remarks in *Fitzgerald v IAG New Zealand Limited* [2018] NZHC 3447 at [28]–[29], discussed at paragraph **Error! Reference source not found.** above.

(b) to provide guidance under the Building Act as to options for repair.

122. It appears, from case law and other sources, that the MBIE Guidance Document was indeed used for its core purpose of providing guidance as to appropriate repair methodologies for stakeholders.

123. The EAG was a pragmatic initiative at the time, designed to share crucial technical knowledge in an unprecedented environment. It was a practical attempt to co-ordinate the engineering response to repair methodologies. The legal status of the MBIE Guidance Document, as guidance issued under section 175 of the Building Act, was appropriate for its intended function.

124. There was a huge demand for guidance of this nature. The counterfactual of no MBIE Guidance Document (or similar document) would have involved every engineer and stakeholder trying to arrive at individual engineering solutions for widespread unprecedented engineering problems. This would have inevitably resulted in duplication, delay and potentially confusion leading to further disputes.

125. EQC had two representatives on the EAG (or four, including EQC's engineers). However, given the composition and eminence of the group, EQC did not control the EAG, in the sense of directing the outcome of its work.

126. However, as we note above, with the benefit of hindsight, and as proffered by the Chair of the EAG, it would have been appropriate to separate the governance and technical functions of the EAG, and to provide for a wider stakeholder involvement (including homeowner representatives) in the governance function of the EAG, while clearly distinguishing between this function and the technical function of the engineering experts. As it was, no "governance" structure for the EAG was established apart from the EAG itself.

127. There was a reference in section 2.1 of the December 2010 MBIE Guidance Document to "like for like" repairs and repairs to pre-earthquake condition, which was inconsistent with the next sentence, which referred to the "when new" repair standard. This reference had the potential to cause confusion. This reference was deleted from the second (2011) and subsequent iterations of the MBIE Guidance Document. The MBIE Guidance Document could have been clearer that it was not setting out to define or explain legal rights. It may have been better not to have said anything on this subject.

128. We conclude that the MBIE Guidance Document did not play a significant role in shaping the understanding of the EQC claims personnel as to the correct standard of repair under the EQC Act. Were that so, we would have expected to see evidence of a change of approach shortly after the second (2011) edition of the MBIE Guidance. We did not.

129. There little attention given by the relevant personnel from 2010 to 2012 to the correct standard of repair under the EQC Act. EQC's written training materials during this period say nothing material on the subject. We infer from this, and from the terms in which the repair standard and "betterment" were later addressed,[14] that there may initially have been considerable variability and inconsistency in the repair standard EQC sought to achieve.

130. In hindsight, there was a need for EQC to clearly articulate:

(a) what the MBIE Guidance Document was designed to do (and not do);

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[14] See paragraph 70 above

(b) how it was to be applied with the other guidance available; and

(c) what training to EQC staff and other staff was to be provided to assessors (and indeed, what an "assessment" entails).

131. In any future event, EQC should publicly articulate the relevant legal positions and definitions (especially of key issues like the relevant legal standard of repairs), and should ensure to provide training to assessors and contractors on both the standard of repair, and performance of repairs.

132. There is no evidence that EQC (or any other person) intended to use the EAG, or the MBIE Guidance Document to reduce legal entitlements. Its primary purpose was not to define legal entitlements. Nor have we seen evidence of EQC deploying the MBIE Guidance to cut costs and minimise its insurance exposure. To the contrary, the intention of all parties involved in the creation and continuation of the MBIE Guidance Document appears to have been to provide guidance on repair methodologies, and to assist all stakeholders to fulfil their legal duties. The MBIE Guidance Document is, and was, publicly available for scrutiny by those impacted by it.

133. Despite initial ambiguity, by 2013, EQC documentation was focused closely on the correct standard of repaid under the EQC Act. By the time it received a Note of advice from Chapman Tripp dated August 2015, EQC had developed a proper understanding of the statutory repair standard, the practical implications of the "when new" standard, and the relevance of "betterment". In general, we conclude that EQC's apprehension of the statutory repair standard improved over time to become clearer, more certain and more consistent.

134. This is underscored by two documents MBIE published in 2016, namely: "Clarification of the role of MBIE residential guidance homeowner insurance policies" in January 2016, and the joint statement issued by EAG and EQC in April 2016. The joint statement in particular, is very clear as to the correct standard of repair under the EQC Act.

135. The MBIE statement clarifies that: "The guidance provides technical solutions that comply with the Building Act and Building Code. It is not a substitute for the policy homeowners have with their insurer, which will take precedence. The Ministry's guidance provides good practice repair solutions, but does not address insurance entitlement. Entitlements provided by insurers' policies may be greater than or equal to the repair and rebuild solutions provided by the MBIE guidance depending on the wording of the individual policies."

136. In 11 of the 13 CHRP files we examined, the standard of repair as described in the scope of works was to the standard of the EQC Act.

137. The repairs instructed in two of the 13 CHRP files (from 2011 and 2015) were considered to probably be below the statutory repair standard. The concerns in both cases were the degree of floor relevelling achieved or instructed. As reflected in the case law, this is an area where professional judgment is required, and where there can be structural reasons limiting the extent to which a floor can be relevelled. There is no reason to think these examples point to any systemic issues relating to the understanding of the appropriate repair standard, for any period, including 2010 - 2013.

138. While beyond the mandate of this report, the brevity of the EQC Act's entitlements has at times led to ambiguity and confusion. It may be that a more explicit, and easy to understand, statutory definition of these entitlements is appropriate. This may require law reform to enable EQC to provide more specific and comprehensive means to address practical

concerns about the implementation of the EQC Act standard (including to provide clarification on the current standard as needed).

Appendix 1

Categories of key documents considered include:

- MBIE Guidance (all editions, being the first edition published on 20 December 2010, the second edition published in December 2011, the third edition published in December 2012 and the subsequent updates to the MBIE Guidance issued thereafter, all of which are published on the MBIE website)

- Various correspondence to and from s9(2)(a) to EQC personnel or to members of Parliament relating to EQC

- Documentation released to s9(2)(a) under Official Information Act requests

- Various EQC training materials, papers and slideshows dated from August 2010 onwards and prepared by various EQC personnel

- EQC Board Papers and meeting minutes of meetings that took place from September 2010 to December 2010

- Various other EQC correspondence from 2010 and 2011, including internal emails between various EQC and EAG personnel, memoranda prepared on various topics and emails with legal advisers

- Information on www.fyi.org.nz relating to the EAG

Appendix 2

Dave Brunsdon	Kestrel Group Limited
Graeme Beattie	BRANZ
Barry Brown	Fraser Thomas Ltd/NZ Structural Engineering Society
John Hare	Holmes Consulting Group Ltd/NZ Structural Engineering Society
George Hooper	EQC
John Leeves	Tonkin & Taylor Ltd
Pat Moynihan	EQC
Rob Robinson	Remediation Specialist
Roger Shelton	BRANZ
Tim Sinclair	Tonkin & Taylor Ltd
John Snook	Canterbury Structural Group/NZ Structural Engineering Society
Mike Stannard	Department of Building and Housing

Engineering Advisory Group on House Repairs and Reconstruction Following the Canterbury Earthquake

Terms of Reference
Phase 1: Feasibility and Indicative Content

31 October 2010

Background

Following the Darfield, Canterbury Earthquake of 4 September 2010, the Earthquake Commission (EQC) established an Engineering Advisory Group to consider the range of technical issues the recovery of residential dwellings, and to establish the feasibility and indicative content of a Guidance Document to be produced by the Department of Building and Housing (Phase 2).

Objectives of the Advisory Group

(i) To establish the engineering requirements and regulatory linkages necessary to expedite the house repair and reconstruction process following the agreement on land remediation issues.

(ii) To identify the engineering requirements for various repair and reconstruction options and techniques.

(iii) To establish the elements and Terms of Reference of an ongoing Engineering Advisory Group to be established by the Department of Building and Housing to produce a Guidance Document

Particular Areas of Work

The areas of work being addressed by the Engineering Advisory Group in the scoping phase (Phase 1) include:

1. Establishing appropriate structural and geotechnical engineering approaches to repair and reconstruction;
2. Consulting with Christchurch City, Waimakiriri District and Selwyn District Councils on the regulatory issues and processes to be followed;
3. Consultation on the technical objectives and processes to the engineering profession, the wider construction sector, and other affected agencies;
4. Consideration of suitable engineering resources in support of the recovery operations.

Structure and Composition of the Engineering Advisory Group

The Engineering Advisory Group is to comprise a small group of leading engineers and remediation specialists including representatives from the following organisations:

- EQC
- Department of Building and Housing
- BRANZ (incl. representing the NZS3604 Committee)
- Structural Engineering Society (SESOC)
- Tonkin and Taylor

The Engineering Advisory Group reports during Phase 1 to Dr Hugh Cowan, Research Manager, EQC.

Arrangements for Group Members

Those members representing government agencies (EQC, DBH) are providing their input directly. Other members are to be engaged on a commercial basis by EQC.

Engineering Advisory Group on House Repairs and Reconstruction Following the Canterbury Earthquake

Terms of Reference (Draft 1)

Phase 2: Production of Guidance Document

1 November 2010

Background

Following the Darfield, Canterbury Earthquake of 4 September 2010, an Engineering Advisory Group was established to consider the range of technical issues involved in the recovery of residential dwellings.

After the feasibility and content scoping stage facilitated by EQC during October, the production of a Guidance Document is to be co-ordinated by the Department of Building and Housing.

Objectives of the Advisory Group

(i) To document the engineering requirements and regulatory linkages necessary to expedite the house repair and reconstruction process following the agreement on land remediation issues.

(ii) To provide guidance to EQC, commercial insurers, the Canterbury Earthquake Recovery Commission and Christchurch City, Selwyn District and Waimakiriri District councils on the engineering requirements and regulatory issues and processes.

(iii) To convey the engineering requirements for various repair and reconstruction options and techniques to the insurance, design and construction sectors.

Particular Areas of Work

The areas of work to be addressed by the Engineering Advisory Group include:

1. Documenting appropriate structural and geotechnical engineering approaches to repair and reconstruction;
2. Obtaining consensus across the insurance sector on the technical objectives and recommended approaches;
3. Obtaining agreement with Christchurch City, Waimakiriri District and Selwyn District Councils on the regulatory issues and processes to be followed;
4. Communication of the technical objectives and processes to the engineering profession, affected agencies and to the wider construction sector;

Principal Output of the Advisory Group

The principal output of the Engineering Advisory Group is a Guidance Document addressing the following aspects:

1. A summary of relevant insurance principles and requirements, and regulatory issues and requirements

2. Future performance expectations for foundations and floor systems for both repaired and reconstructed dwellings
3. Principal options and methods for major re-levelling work for houses to be repaired
4. Recommended foundation and flooring systems for houses being completely rebuilt
5. Proposed arrangements for structural and geotechnical engineering input prior to and during construction work

This guidance document is to be produced as soon as practicable, including appropriate peer review processes, and taking account of required consultation. The target date for a final draft document for the Department is mid-November.

The Engineering Advisory Group may be called upon for other involvement and outputs throughout the recovery process.

Structure and Composition of the Engineering Advisory Group

The Engineering Advisory Group is to comprise a small group of leading engineers and remediation specialists including representatives from the following organisations:

- EQC
- Department of Building and Housing
- BRANZ (incl. representing the NZS3604 Committee)
- Structural Engineering Society (SESOC)
- Tonkin and Taylor

The Engineering Advisory Group is to have access to and the ability to task other practitioners, researchers and agency representatives whose inputs would be of value to them.

The Engineering Advisory Group is to be set up as a committee appointed by the Department's Chief Executive, and reports to Dave Kelly, Deputy Chief Executive.

Arrangements for Group Members

Those members representing government agencies (EQC, DBH) are providing their input directly. Other members are to be engaged on a commercial basis by the Department of Building and Housing.

Appendix 4

s9(2)(a)

From: Hugh Cowan
Sent: Monday, 8 November 2010 5:41 pm
To: 'david.kelly@dbh.govt.nz'
Cc: s9(2)(a) ; Ian Simpson; s9(2)(a)
Subject: Transfer of EAG stewardship to DBH
Attachments: DBH-10-11-08.pdf; TOR - Phase 1.pdf; TOR - Phase 2.pdf

Dear David,

As discussed previously, EQC is keen to see practical engineering guidelines for reinstatement of housing in Canterbury, developed and applied consistently. The intended outcome is the improved future performance of residential housing under earthquake loading and empirical evidence of a systematic approach to seismic risk management in New Zealand. The economic significance of the latter point will grow as consideration turns to the future underwriting of earthquake (liquefaction) risks, both here and abroad.

The attached TOR (Phase 1) describes work sponsored by EQC during October, and the letter requests the transfer of stewardship for the advisory group to DBH, so that the Group's work can be formally constituted as guidance material and disseminated under the auspices of the Department. The TOR – Phase 2 is an initial draft of possible next steps for your consideration.

Naturally, EQC will continue its close collaboration with the Department on this important topic and I look forward to assisting you to achieve a positive outcome for all.

regards

Hugh Cowan
Research Manager
Earthquake Commission
Level 20, Majestic Centre
100 Willis Street, P.O. Box 790
Wellington, New Zealand
DDI s9(2)(a)

8 November 2010

David Kelly
Deputy Chief Executive
Department of Building and Housing
P O Box 10-729
WELLINGTON

Dear David

Technical Advice for Repairing and Reconstructing Houses Damaged in the Canterbury Earthquake
I am writing to initiate with you the migration of an EQC-sponsored engineering advisory group to the Department's stewardship, to guide certain aspects of the engineering requirements for residential recovery in Canterbury. As we have previously discussed, technical complexities associated with the repairs and reconstruction of houses damaged by the 4 September earthquake are apparent. In addition to the variability in the response of the land, a range of structural effects on dwellings has occurred due to liquefaction and ground shaking.

In late September, EQC established an engineering advisory group to consider the technical issues and processes associated with the recovery for residential dwellings, with the group engaged along similar lines to our collaboration on the statutory review of earthquake prone building policy. The group comprises representatives from BRANZ and selected industry leaders from the Structural Engineering Society, in addition to key people from EQC and its geotechnical engineering consultant Tonkin & Taylor, plus Mike Stannard from the Department. Collectively they represent a significant body of knowledge and experience in the disciplines of earthquake, structural and geotechnical engineering, and building remedial work.

The engineering advisory group has quickly developed a consistent and convergent technical philosophy and approach. A sixty page draft document has been produced, and a clear view established as to the steps involved in producing a final draft version by mid-November. The organisations and individuals briefed to date (the three local councils, AMI Insurance, Fletcher Construction, local structural and geotechnical engineers) reportedly are very positive about the potential of a future guidance document.

EQC has co-ordinated and funded this feasibility phase of work during October as part of our role to facilitate the transfer of information from the research domain towards operational application. However, you will recall at the early stages of the group's deliberations, we agreed in principle that any guidance material should be issued by the Department.

To progress this we now need to formalise the arrangements under which the Department will co-ordinate the work of the group as it migrates to the production phase. I have taken the liberty of asking the group to prepare the attached draft Terms of Reference for the production phase of this project (refer attachment) and look forward to discussing this at your earliest convenience.

Yours sincerely

Hugh Cowan
Research Manager

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