

2017

CTV Investigation



Peer Review of Legal Opinion

Crown Law, Wellington

8 September 2017

Detective Superintendent Peter Read
New Zealand Police Canterbury District HQ
DX WX10057
CHRISTCHURCH 8011

By email: [REDACTED]

Dear Peter,

CTV criminal investigation: peer review of Christchurch Crown Solicitor's advice
Our Ref: POL055/2226

1. Thank you for your letter of 20 June 2017 and enclosures. We also appreciate the opportunity to meet with you and to discuss the issues.
2. On 26 May 2017, Police prepared a report for the Christchurch Crown Solicitor,¹ Mark Zarifeh, recommending charges for manslaughter be brought in relation to Dr Alan Reay and Mr David Harding, the engineers responsible for the design of the CTV building.
3. On 16 June, the Crown Solicitor provided a draft legal opinion in relation to the proposed prosecution. Subject to various points of clarification, he considered Police would be entitled to conclude that a prosecution was warranted in terms of the *Solicitor-General's Prosecution Guidelines*.² However he acknowledged the issues are difficult and finely balanced.

¹ Consistent with the obligation of Police to consult the Crown Solicitor on any charging decision that is likely to attract significant public interest (Memorandum of Understanding Between the Solicitor-General and the Commissioner of Police (1 July 2013), Schedule B para [1.3])

² In summary, the *Guidelines* provide that the test for prosecution is met if (i) the admissible evidence is sufficient to provide a reasonable prospect of conviction ("the Evidential Test"; and (ii) prosecution is required in the public interest ("the Public Interest Test") (at [5.1]). A reasonable prospect of conviction exists if "there is credible evidence which the prosecution can adduce before a court and upon which evidence an impartial jury (or Judge), properly directed in accordance with the law, could reasonably be expected to be satisfied beyond reasonable doubt" that an offence has been committed ([5.3]). This is a matter of judgment, not a mathematical science, and requires prosecutors to anticipate and evaluate likely defences ([5.4]). Prosecutors may be required to make an assessment of the quality of the evidence ([5.4]). It is only once the Evidential Test is satisfied that the Public Interest test is then considered ([5.5]).

4. You have sought a peer review of the Crown Solicitor's draft opinion. Our advice is intended to be read together with his comprehensive opinion and we do not repeat his summaries of the background and evidence.

Peer review: context

5. The decision whether to prosecute rests with Police.³ However the Solicitor-General has general oversight of the conduct of all public prosecutions,⁴ and direct responsibility for Crown prosecutions from the point specified in the Crown Prosecution Regulations 2003.⁵ It is not generally the function of a peer review to undertake a fresh and independent analysis of the material on which an opinion is based, and a discretion to prosecute recognises there will not always be one "right" answer. However you have helpfully provided us with two volumes of investigative materials.⁶ We approach this peer review on the basis it is intended we give the issues close examination and offer advice on the merits.
6. We have been greatly assisted by the clarity and organisation of the opinions and materials, reflecting a thorough investigative effort and review.

Summary

7. We are in general agreement with the Crown Solicitor's analysis. We agree with him that:
- 7.1 The issues are difficult and finely balanced;
- 7.2 There are "real issues" with causation and with proof of a major departure.
- 7.3 The likelihood of a successful prosecution is not high and, if the defendants were convicted, a non-custodial sentence may well result.
- 7.4 The public interest considerations go both ways.

³ Memorandum of Understanding Between the Solicitor-General and the Commissioner of Police (1 July 2013) at [7.1]

⁴ Solicitor-General's Prosecution Guidelines (2013) [2.5]; Criminal Procedure Act, s185.

⁵ Solicitor-General's Prosecution Guidelines (2013) [3.3]. In the case of manslaughter (a category 4 offence) the Solicitor-General assumes responsibility after the first appearance: Crown Prosecution Regulations 2003 r 5(a).

⁶ The materials provided were as follows: **Folder One:** Police Report to Crown Solicitor (26 May 2017); Crown Solicitor's draft opinion; Beca Report (15 July 2016); Department of Building and Housing report (25 July 2012); Summaries of Evidence (draft) re Alan Reay and David Harding. **Folder Two:** CERC Final Report vol 6 (CTV); Intelligence document (draft) re key themes and witnesses; Spreadsheet (draft) CTV building history; GNS report for Christchurch City Council (May 2005); Report into Building Safety Evaluation Processes in the CBD following the 4 September 2010 Earthquake; CERC Final Report vol 1 (summary and recommendations in volumes 1-3 seismicity, soils and the seismic design of buildings); Madras Equities Ltd Damage Report (6 October 2010); Intelligence document (draft) CTV layout; Coroner's findings (25 March 2014); Spreadsheet (draft) ARCE, ARCL, [REDACTED] Spreadsheet (draft) "Standards of the Day" interviews including 12x witness statements; Soils and Foundations (1973) Ltd Report (18 June 1986); Tonkin and Taylor Ltd Report (11 July 2011); Structural Specification (CTV building); Holmes Consulting Ltd report (January 1990); Beca CTV Building Foundation and Soils Investigation Report (16 December 2016); [REDACTED] Review (25 October 2016); [REDACTED] (17 May 2017). **Folder Three (IPENZ material):** "Outline for Investigating Committee Meeting on 14 August 2013"; Transcript of meeting 14 August 2013; Affidavit of [REDACTED] (5 August 2013); Affidavit of [REDACTED] (5 August 2013); Affidavit of [REDACTED] (12 August 2013); Affidavit of [REDACTED] (5 August 2013); Affidavit of [REDACTED] (13 August 2013); Affidavit of [REDACTED] (13 August 2013); Transcript of meeting 15 August 2013; Submissions of Counsel for Mr Harding (26 August 2013); **Additional Materials:** Booklet of building plans/drawings; witness statement [REDACTED] (23 June 2017); letter from Police (7 July 2017) setting out Beca response to Crown Solicitor queries; Response from [REDACTED] to Crown Solicitor queries (undated, received by Crown Law 1 August 2017); Response from [REDACTED] to Crown Solicitor queries (3 August 2017)

8. We identify both the “year and a day” rule, and the “but for” causation issue, as posing greater obstacles than the Crown Solicitor does. We also think that the considerable cost of going to trial is relevant to the overall public interest.
9. A conservative approach is warranted in this context. Putting aside the “year and a day” rule (which we address separately below), we do not consider the evidential test is satisfied. Even if the evidential test is satisfied, we do not consider the public interest requires the prosecution of a case that is at best marginal on the evidence. We do not recommend prosecution in this instance.

LEGAL ISSUES

10. As the Crown Solicitor notes,⁷ the High Court has suggested prosecutors think “long and hard” before commencing prosecutions for manslaughter based on negligence. This is consistent with “subjectivist” movements in the criminal law generally.⁸ Negligent manslaughter is a somewhat controversial exception to the normal principle that serious offences require proof of a blameworthy state of mind. The anomalous nature of the offence is illustrated by the point that the related, but lesser, offence of criminal nuisance requires proof that the person *knew* that the relevant act or omission would endanger the lives, safety or health of the public.⁹
11. In our view, in a borderline case this may mean a conservative approach is warranted.

Preferred duties

12. We agree with the Crown Solicitor’s preference¹⁰ for a charge relying on the duties under s 155, with s 156 as an alternative. We have not considered the precise wording of any proposed charge.

Ordinary versus gross negligence: Crimes Act s 150A

13. We agree with the Crown Solicitor’s analysis.¹¹ The safest course is to assume the higher threshold (“major departure”) applies. Even if the point is legally arguable, the issue is relevant to the discretion to prosecute. In our view it would not be appropriate to prosecute - in effect - conduct that is no longer criminalised.
14. We also agree with the Crown Solicitor’s discussion of the meaning of “major departure.”¹² Essentially the jury must be satisfied the negligence was so bad or so unreasonable that it should be judged to be criminally culpable.
15. This point deserves emphasis. The authors Smith and Hogan note that in this sense, gross negligence is *more* favourable to defendants than objective recklessness.¹³ It

⁷ MNZ at [284]

⁸ e.g. the rejection of an objective standard of recklessness in favour of one requiring actual foresight: *R v G* [2003] UKHL 50

⁹ Crimes Act 1961, s 145 (maximum penalty: 12 months’ imprisonment); *R v Anderson* [2005] 1 NZLR 774 (interpreting s 145 as requiring actual knowledge or a recklessness).

¹⁰ MNZ at [39]-[51]

¹¹ MNZ at [58]-[65]

¹² MNZ at [52]-[57]

¹³ Smith and Hogan’s *Criminal Law* (14th ed) at 643

enables a jury to consider a range of “mitigating” circumstances in deciding whether a defendant’s conduct deserves to be condemned as the serious crime of manslaughter.

16. While recklessness and gross misconduct (e.g. deliberate flouting of the rules) are not prerequisites, their presence will make it much easier to establish a major departure. And their absence may be relevant to the jury’s consideration when assessing the grossness or criminality of the conduct.¹⁴
17. This is discussed further below in relation to the facts of this case.

The “year and a day” rule: Crimes Act s 162

18. As the Crown Solicitor notes,¹⁵ this issue is potentially fatal to any prosecution. Accordingly we have examined it in some detail.
19. Section 162¹⁶ is a statutory embodiment of a long-standing common law rule. Its purpose has been identified as two-fold:¹⁷ (i) reflecting medieval distrust of medical science in ascertaining cause of death, where there is a gap between injury and death; and (ii) ensuring that a person does not remain at risk of prosecution for murder indefinitely (“a line has to be drawn somewhere”). Supporters of the rule have also pointed out that justice may be served by prosecuting for an alternative offence.
20. The rule is now generally recognised as an anomalous anachronism and it has been abolished in most comparable jurisdictions.¹⁸ In this context it is unlikely s 162 will be given an expansive interpretation. It must, however, be given effect.¹⁹ It is noted that despite recommendations in the past for its repeal,²⁰ this has not yet occurred. Repeal of s 162 is currently on the reform agenda, but any repeal will almost certainly not be of retrospective effect.²¹ The present case illustrates why reform is needed.
21. One of the difficulties with the common law rule is that it was uncertain whether time begins to run from the relevant act, or from the date of injury. An example sometimes given is that of a bomb set with a timer, which detonates after a year and a day and kills someone. No case appears to have arisen that addresses the issue

¹⁴ AGs Reference (no 2 of 1999) [2000] Crim LR 475

¹⁵ MNZ at [81]

¹⁶ The wording of s 162 is almost identical to the equivalent section in the 1893 Code. The commissioners saw “no reason” to depart from the “ancient rule.” (Report of the Royal Commissioners (1893) at p23)

¹⁷ Criminal Law Revision Committee (UK) 14th report: Offences Against the Person (1980) para [39]

¹⁸ Generally see Law Commission (UK) “The Year and a Day Rule in Homicide” Consultation Paper no.136 (1994); Legislating the Criminal Code: the Year and a Day Rule in Homicide (Law Com no. 230) (1995); *R v Inner West London Coroner ex parte De Luca* [1989] QB 249

¹⁹ See *R v J* [2004] UKHL 42, [2005] 1 Cr App R 19 where the House of Lords put a stop to the long-standing Crown practice of charging indecent assault to “get around” the limitation period in respect of unlawful sexual intercourse, even though the limitation period could not be justified by modern standards.

²⁰ Crimes Consultative Committee Crimes Bill 1989: Report of the Crimes Consultative Committee Presented to the Minister of Justice April 1991 (Department of Justice, 1991) at 51-52

²¹ Very recently (19 July 2017) Minister Adams directed that work begin on a Crimes Act Amendment Bill, and has directed officials to undertake further work on “amending the year and a day rule.”

(perhaps reflecting reluctance to prosecute in such cases).²² This uncertainty has been cited in support of abolishing the rule.²³

22. When the Criminal Law Revision Committee (UK) considered the issue in 1980 it recommended that time should run from the date of injury, rather than the act which causes death.²⁴ As the Crown Solicitor notes, this was also the “submission” of the authors Smith and Hogan, who observed that such an approach was consistent with the causation rationale of the rule, and with policy.
23. The difficulty, however, is that in New Zealand it is not a common law rule amenable to development or refinement, but is enshrined in statute (and has been since 1893, in terms virtually unchanged). The wording of s 162 is clear that the time begins to run from the relevant unlawful act or omission:

“(1) No one is criminally responsible for the killing of another unless the death takes place within a year and a day after the cause of death.

(2) The period of a year and a day shall be reckoned inclusive of the day on which the last **unlawful act** contributing to the cause of death took place.

(3) Where the cause of death is an omission to fulfil a legal duty, the period shall be reckoned inclusive of the day on which **such omission** ceased.

[...]”[emphasis added]

Possible approaches

24. Taking subsection (1) in isolation it is arguable that the “cause” of death for the purposes of s 162 should be taken as the immediate cause (i.e. the building collapse). This would certainly be consistent with the policy rationale of the rule. Unfortunately however, subsections (2) and (3) are explicit, and make it plain that the “cause” of death means the relevant unlawful act or omission.²⁵
25. As the Crown Solicitor notes, to avoid being captured by the rule, the prosecution would need to argue that the relevant “omission” was in effect a continuing one, and did not “cease” (in terms of subs (3)) until the building collapsed and the danger materialised, causing injury.
26. While certainly supported by policy, such an approach does not sit at all comfortably with the language of the section. Nor does it sit easily with the proposed charge. The relevant “omission” for the purposes of s 168(2)(b) is the failure to take reasonable care in “undertaking” (s 155) the structural design of the building in 1986. Dr Reay and Mr Harding were not “undertaking” anything in 2011.

²² See discussion in Law Commission (UK) “The Year and a Day Rule in Homicide” Consultation Paper no.136 (1994) at [2.17]-[2.18]

²³ *Idem*, and at [6.4(d)].

²⁴ Criminal Law Revision Committee (UK) 14th report: Offences Against the Person (1980) para [40] (NB this early report recommended retention of the ‘year and a day’ rule).

²⁵ Nor is it possible to interpret time under s 162 as running from the date of the *actus reus*, as this would deprive s 162 of any effect. The *actus reus* of manslaughter is generally recognised as comprising a conduct element (an act or omission) and a result element (death).

27. We do not read Smith and Hogan as supporting the “continuing omission” approach.²⁶ The authors were considering the preferred position at common law, not the language of s 162. They submitted that time should run *not* from the date of the act or omission, but from the date of injury (where these are different).

Tort law

28. We do not consider that analogies with “discoverability” in tort law are particularly helpful, given the very different statutory context. Under the former Limitation Act 1950, the limitation period ran from the date the cause of action “accrued.”²⁷ A considerable body of case law addresses the meaning of accrual, which is not defined in the Act. Essentially it means when all facts necessary to establish the cause of action exist. For torts where damage is required, time begins to run when the damage occurs or, in special cases (e.g. latent building defects, personal injury and sexual abuse), when the damage was discoverable.
29. (Strictly speaking, if this approach were applied to manslaughter, time would run from the time the offence was complete – i.e. when death occurred (or was discoverable). This would obviously render the “year and a day” rule redundant).
30. If anything, tort law arguably provides support for an interpretation of s 162 that would bar prosecution in this case. The current Limitation Act 2010 replaces the concept of accrual with a “primary” time period that runs from the date after “the date of the act or omission on which the claim is based.”²⁸ The wording is thus similar to s 162, and is considered to leave no room for “discoverability” (which is addressed under specific “late knowledge” provisions).²⁹
31. In *Johnson v Watson*,³⁰ the Court of Appeal considered the effect of a similarly-worded provision, s 91 of the Building Act 1991, which provided that no proceedings may be brought 10 years or more “after the date of the act or omission on which the proceedings are based.” The Court noted the difference between “accrual” of a cause of action (which may be postponed, e.g. by fraud), and s 91:
- “Section 91(2) is by contrast concerned with the act or omission on which the proceedings are based. An act or omission occurs on a particular day. No question of extension of time can logically arise when the starting point is measured from the day of the occurrence of an act or omission...In short, s 91(2) means exactly what it says. A plaintiff cannot in any circumstances sue more than ten years after the act or omission on which the proceedings are based.”
32. While we do not discount the possibility of the courts taking a robust and creative approach to s 162, we regard the “year and a day” rule as presenting a more formidable obstacle than previously identified. In our view it is very likely to be a complete bar to the prosecution. That said, there is an absence of authority on point. If this prosecution otherwise satisfied the *Prosecution Guidelines* there may be some

²⁶ Cf MNZ at [80]

²⁷ Limitation Act 1950 s 4

²⁸ Limitation Act 2010 s

²⁹ Todd, *The Law of Torts in New Zealand* (7th ed 2016) at pp1377, 1396, 1400.

³⁰ [2003] 1 NZLR 626

merit in seeking to test the “year and a day” issue before the courts. As previously outlined however, we do not think the *Guidelines* are satisfied here.

Criminal nuisance

33. It might be thought that if manslaughter is precluded by s 162, criminal nuisance provides an alternative. The Crown Solicitor has identified difficulties with this charge,³¹ particularly with proof of recklessness, with which we agree.

EVIDENTIAL SUFFICIENCY

34. Negligent manslaughter is typically difficult to prosecute. One advantage of the present case over similar large-scale catastrophes (e.g. Cave Creek, Pike River) is that the absence of a mechanism for corporate manslaughter is not as problematic. But this case shares other difficulties. We are in general agreement with the Crown Solicitor’s detailed analyses of these, which would appear to fall into two broad categories:
- 34.1 Difficulties establishing “major departure;”
 - 34.2 Difficulties with causation.
35. Overall the case is characterised by the complexity of the issues, exacerbated by the inevitable “freight” of the prior investigations and conclusions (DBH, CERC), and the array of expert opinion, much of which is conflicting. We agree with the Crown Solicitor that complexity and conflict do not necessarily mean there cannot be a reasonable prospect of conviction.³² But this background creates considerable scope for the defence to raise a reasonable doubt.
36. It might be said there is a “pathway” to conviction here, if a jury accepts Beca’s evidence on the key issues. We accept this is the case, but the evidential sufficiency enquiry does not end there. A decision to prosecute requires an evaluation of other evidence and likely defences and an overall judgement to be made as to whether in the circumstances a jury could reasonably be expected to convict. It is not “trial by expert,” so the cogency of Beca’s conclusions may be examined. The more cautiously expressed opinions of the peer reviewers are particularly relevant here (discussed further below).

Major departure

37. In broad terms, this is a case of incompetence and inexperience rather than deliberate flouting of the rules or conscious risk-taking. As set out above, this makes “major departure” much harder to establish. The test for the jury is open-textured, enabling it to take into account “mitigating” circumstances in assessing whether the negligence was sufficiently gross to attract liability for the serious offence of manslaughter. A principal difficulty here is the context: a small engineering firm operating in the 1980s, a time before more formalised quality assurance mechanisms were implemented in the industry.

³¹ MNZ [102]-[103]

³² MNZ at [281]

38. The Police case is dependent on the Beca analysis (which incorporates interviews with engineers practising in the 1980s) and the enhanced “standards of the day” evidence. While Police characterise this as “strong” and “consistent” evidence supporting a major departure,³³ there are nevertheless difficulties with it, in addition to the obvious issues of recollection and hindsight. Much of the evidence is expressed in terms of “usual” or best (as opposed to mandatory) practice, implying an acceptable or at least a tolerated degree of variation, and many of the witnesses are unable to speak of practise within a small or “sole practitioner” firm. The evidence is also not always unanimous – e.g. in relation to the issue of reliance on council checks.³⁴
39. We agree with the Crown Solicitor that the case for major departure is vulnerable, both for Dr Reay and Mr Harding. While it is supported by Beca’s expert opinion, their opinion is expressed in somewhat conclusory terms.³⁵ The distinction between negligence and major departure will be central to any trial. The lack of precision/unanimity in the standards of the day evidence is critical here. We think the case for negligence is clear; the case for major departure much less so.
40. In relation to Mr Harding, the case for “major departure” is supported by the number (eleven) and nature of errors identified by Beca.³⁶ (Having said that, “major departure” is not, of course, an arithmetical question of the number of errors, and many of the errors appear to be related – i.e. they occurred because of the preceding error(s)).
41. We agree with the three “qualifications” identified by the Crown Solicitor, namely:³⁷
- 41.1 Issues around interpretation of the Codes (some of which are “not well described”³⁸);
 - 41.2 [REDACTED] reservations about the duty as it related to Mr Harding (albeit based on US experience); and
 - 41.3 The issue of reliance on council permit checks, especially given the evidence Mr Tapper requested further calculations (and the non-availability of Mr Tapper and Mr Bluck).
42. In addition, a jury could well take into account:

³³ Report for Crown Solicitor 26 May 2017 at p45

³⁴ MNZ at [157], citing the evidence of [REDACTED]. In addition we note Geoff Banks’ evidence that he did not do a full structural review in 1990 in part because he was “not concerned” because the building had received consent from the council (Summary of evidence p24). We also note that another of the witnesses, [REDACTED] has supplied an affidavit in support of Dr Reay for the purposes of the IPENZ proceedings.

³⁵ Beca, “Summary and Conclusions” pp 6-7. An expert opinion is not inadmissible simply because it expresses a view about the ultimate issue: Evidence Act 2006, s 25(2)(a). But such an opinion will still need to satisfy the criterion of offering “substantial help” to the fact finder (s 25(1)). We have assumed that in such a specialised area, the court will be assisted by expert evidence addressing whether the errors represented a major departure. But such evidence needs to identify *why* this is so (i.e. why it is more than mere negligence).

³⁶ Beca [7.4.1]

³⁷ MNZ at [151]-[153]. Many of the points referred to at [152] appear to relate more to causation issues.

³⁸ E.g. Beca at 7.3.7

- 42.1 Mr Harding's "general approach"³⁹ was consistent with standards of the day: the errors are in the nature of mistakes (attributable to inexperience, human error, lack of review) while he was endeavouring to design a code-compliant building.
- 42.2 The standards of the day evidence suggests there was not "one accepted way" of approaching the relationship between primary seismic and primary gravity structures.⁴⁰
- 42.3 Mr Harding sought to apply the Lansborough House calculations template provided by Mr Henry/Dr Reay.
- 42.4 He made efforts to address shortcomings in the north wall complex with the addition of the southern shear wall, and was ultimately reassured by ETABS.
- 42.5 Mr Harding's errors are not immediately obvious, and were not picked up by the council at the time, or by [REDACTED] in 1990 (other than in relation to the north wall connections).
- 42.6 There appears to be somewhat conflicting evidence about the degree of "eccentricity" of the design concept (which, if we understand correctly, is relevant to Mr Harding's flawed "judgement call" not to detail the primary gravity structure for seismic frame action).⁴¹ There also appears to be a difference of opinion around the contribution of the building's "eccentricity" to the collapse.⁴²
- 42.7 Mr Harding did not misrepresent his experience, and was entitled to assume a level of supervision from Dr Reay, from whom he evidently sought at least some assistance.
43. Negligence is an objective standard, and where a professional person holds themselves out as qualified to perform a task requiring special skill, they must exhibit the care expected of a skilled and informed member of their profession.⁴³ Inexperience is no excuse. However the open-textured nature of the "major departure" standard may leave some room for a jury to take such considerations into account.
44. In relation to Dr Reay, we agree with the Crown Solicitor that the case for major departure is vulnerable, for the reasons he sets out, viz:⁴⁴

³⁹ Beca, at [7.5.1]

⁴⁰ Beca, at [7.5.1]

⁴¹ [REDACTED] affidavit para [16] – design described as "conventional"; [REDACTED] affidavit para [15] – CTV "somewhat" eccentric but not a "highly" eccentric building; [REDACTED] interview summary (Beca p E10): Christchurch sites commonly "eccentric." Against this, we note the apparently clear warning in the loadings code about geometrically dissimilar and/or unsymmetrical shear walls (Beca 7.3.3) and the caution about the need for checks if there is a primary gravity system not intended to carry a seismic load (Beca 7.3.4)

⁴² [REDACTED] describes the eccentricity as a "significant cause" [REDACTED] report, p11), whereas Beca describe it as an "aggravating factor" and state that the eccentricity was not "extreme" (Beca answers to [REDACTED] questions p1).

⁴³ Todd, *The Law of Torts in New Zealand* (7th edition) at p422

⁴⁴ MNZ at [157]

- 44.1 Mr Harding was a senior engineer, who appeared confident and gave no indication he was over his depth.
- 44.2 The Code of Ethics recognises an obligation on engineers not to undertake work beyond their competence, without disclosing its limits. Mr Harding signed off the drawings.⁴⁵
- 44.3 Mr Harding had some (limited) relevant experience, particularly his involvement in Westpark Towers, and was provided with the Lansborough House template.
- 44.4 When Dr Reay asked him about the shear walls, Mr Harding was able to explain what he had done, and reassured him with reference to the re-run ETABs results.
- 44.5 The role of the council checking process, and the lack of clarity around review standards, especially for a small or sole practitioner firm.
45. In addition we note the affidavits filed in the IPENZ proceedings, particularly those from [REDACTED] and [REDACTED]. [REDACTED] says that supervision practice in the industry in the 1980s was variable, and he would have expected a senior engineer of Mr Harding's experience to be able to work independently and with minimum supervision notwithstanding his lack of multi-storey design experience. It was not unusual for engineers to take on novel tasks and there was an expectation they would self-regulate by seeking assistance where required. [REDACTED] evidence is to similar effect, with reference to his understanding of professional ethics.
46. We also note the engineering profession recognised a lack of clarity around the standards of review expected in a small practice. A Practice Note published in 2009 specifically addresses this issue.⁴⁶

Causation

47. The causation issues are well analysed in the Crown Solicitor's opinion, viz:
- 47.1 The cause of the collapse;
- 47.2 The role of the building contractor (i.e. failure to install transverse reinforcement in beam column joints as per Mr Harding's albeit inadequate design; failure to roughen the beam end construction joints; possible – but unlikely – understrength concrete);
- 47.3 The contribution of Code-compliant but “light” transverse column steel, (the Code specifications “shocked” [REDACTED] with their inadequacy, and [REDACTED] had “never seen” such light reinforcement in a New Zealand building before⁴⁷);
- 47.4 The role of the council;

⁴⁵ Beca, [7.5.2]

⁴⁶ IPENZ/ACIENZ Practice Note: Structural Engineering Design Office Practice (August 2009)

⁴⁷ [REDACTED] p7

- 47.5 The 1991 retrofit/role of the diaphragm connections;
- 47.6 The [REDACTED] soil theory;
- 47.7 The severity of the February earthquake;
- 47.8 The cumulative effect of multiple earthquakes;
- 47.9 Alleged inadequacies in earthquake response.
48. Some of these are not compelling issues in their own right⁴⁸ but, as the Crown Solicitor notes,⁴⁹ this will not prevent them being relied upon in a cumulative way in order to raise a reasonable doubt. The sheer number of causation issues that arise here is itself a cause for concern.
49. The Police case is heavily dependent on the Beca opinion which in turn is heavily dependent on the physical testing and modelling Beca carried out. The Crown Solicitor identifies a number of expert criticisms of the accuracy of these methods, including from the peer reviewers instructed by Police, [REDACTED] and [REDACTED].⁵⁰
50. The Beca analysis is also open to the criticism that it focuses on a single collapse sequence (viz. failure of one or more internal columns on the lower levels) and this precise sequence is hotly contested.⁵¹ [REDACTED] describes this as a “limiting” conclusion in that it may give the impression that the non-compliant beam-column joints were the “cause,” whereas the better view (expressed elsewhere by Beca⁵²) is a more holistic or general one (viz. a failure to design primary gravity system for ductility).⁵³
51. Beca acknowledges that the precise collapse initiation and sequence will never be known. They consider their sequence the “most likely.”⁵⁴ As the Crown Solicitor notes,⁵⁵ it would be preferable to pitch the prosecution case more holistically (a number of design errors leading to a general lack of building resilience). However the collapse sequence assumed significance during the CERC proceedings and was a focus of Dr Reay’s submissions.⁵⁶ Bearing in mind the criminal standard of proof, it will be necessary for Beca to address causation in the context of other reasonably possible collapse scenarios. This is not insurmountable, as Beca’s responses to the Crown Solicitor’s questions indicate, but adds considerable complexity.

⁴⁸ We regard the criticisms of the 2011 rescue effort as being particularly unpersuasive as a “causation breaker.” And it would appear the [REDACTED] theory is adequately answered on the evidence.

⁴⁹ MNZ at [267]

⁵⁰ MNZ [177]-

⁵¹ Beca, p 2 (item 1); p 92. CERC summarises the competing expert opinions (Hyland Smith, Holmes, Priestley, Mander) at pp233-246

⁵² Beca p 91

⁵³ [REDACTED] p11

⁵⁴ Beca reply to MNZ questions (MNZ at [176])

⁵⁵ MNZ [200]

⁵⁶ As we understand it, he argued that collapse was triggered by disconnection of the south shear wall, attributable to damage caused by the September earthquake.

Severity of February earthquake

52. The general principle requires that the intervening event (the earthquake) was reasonably foreseeable, before causation can be attributed to a defendant.
53. We agree with the Crown Solicitor's view that this issue is likely to assume central importance at trial, given the arguments raised during the CERC proceedings, CERC's conclusions,⁵⁷ and [REDACTED] reservations (below). We also agree with the Crown Solicitor's misgivings about expressing a conclusion about evidential sufficiency on the basis of the present evidence.⁵⁸
54. As we understand it, "reasonable foreseeability" becomes an issue because:
- 54.1 The 'elastic spectral response' was in excess of that contemplated by the Codes (although this is not considered to be directly related to collapse);
 - 54.2 Vertical acceleration was not contemplated at all by the Codes, and the February earthquake produced unusually high vertical acceleration at various points around the city (described by one expert as "exceptionally high"⁵⁹).
 - 54.3 Beca's view that the vertical accelerations "were not a significant contributor"⁶⁰ to the collapse is vulnerable because:
 - 54.3.1 Determining the effects of vertical acceleration is complex/inexact;
 - 54.3.2 The survey of expert opinion on this issue in the CERC report⁶¹ demonstrates room for disagreement;⁶²
 - 54.3.3 Beca relied on ground motion data from a single site;
 - 54.3.4 Earthquakes can have unpredictable local effects and this may have been the case with the CTV site.

"But for" causation

55. As the Crown Solicitor identifies,⁶³ [REDACTED] peer review raises this issue in stark terms:

⁵⁷ Although CERC did not consider vertical acceleration "by itself" was a primary cause of collapse (p254), it identified the "unusual intensity" of ground motion as one of the reasons (among others) of the collapse (p307).

⁵⁸ MNZ at [227]

⁵⁹ CERC p 255. We note that the September earthquake also featured high vertical acceleration.

⁶⁰ Beca p80 (we note this is expressed in more tempered language later in the report: the vertical accelerations were "unlikely" to have significantly influenced the collapse. (Beca 11.2.6 p83)

⁶¹ CERC pp250-256

⁶² CERC p 250 ("Vertical accelerations alone have been considered as a primary cause of collapse, most prominently by Mr Harding. It has been recognised by many expert witnesses that the contribution of high vertical accelerations would have had a detrimental effect, exacerbating weaknesses in the structure." (Note that CERC appears to suggest that expert(s) other than Mr Harding take the view that vertical accelerations were a primary cause of collapse. You have advised this is not in fact the case).

⁶³ MNZ [194]-[195]

“because the experience and response of individual buildings to individual earthquakes cannot be precisely established by analysis and testing, we cannot concur that the collapse would not have occurred in the absence of the identified errors.

...it is possible that collapse could have occurred in the absence of the design errors due to higher than [expected] ground motions in combination with the lack of resilience that this structure possessed. It is anticipated by the profession and its standards that some few number of code compliant buildings, especially those that do not contain resilient detailing, will experience collapse in extreme earthquake events.”

56. In other words, [REDACTED] disagrees with Beca that the building would not have collapsed “but for” the design errors. It is possible (inferentially reasonably possible) that in the absence of the design errors, the building would have collapsed anyway.
57. We note [REDACTED] similarly says he “would be cautious”⁶⁴ about Beca’s conclusion that the collapse would not have occurred in the absence of the “significant design issues” (viz. understrength and non-compliant shear walls, and non-compliant beam-column joint steel). His language elsewhere is also somewhat qualified. For example, he describes Beca’s view that the non-compliant retrofit would not by itself have caused a pancake collapse as “most probably correct” while allowing for a possibility that the north wall may have detached from the floor structure.⁶⁵
58. At para [196] the Crown Solicitor expresses the view that this is not a bar to proof of causation, as the “but for” test is only a rule of thumb that need not be established in cases of multiple causes, where the issue is whether the cause was substantial and contributing.
59. We are more hesitant about this issue. The “but for” test is described by Smith and Hogan in more mandatory terms⁶⁶ (as a necessary, but not necessarily sufficient,⁶⁷ indicator of legal causation). Likewise in *Kuka v R*⁶⁸ the Court of Appeal stated (in relation to omissions):

⁶⁴ [REDACTED] p 7

⁶⁵ [REDACTED] p 7. In his most recent comments [REDACTED] says that adequate north wall connections would have made a “small difference” to building performance albeit that “I do not think” they would have been sufficient to prevent collapse.” [REDACTED] “Comment on Beca’s answers” at p 1

⁶⁶ Smith and Hogan’s *Criminal Law* 14th edition (2015) at p91: “D’s act **cannot** be regarded as the cause of an event if the event would have occurred in the same way had D’s conduct never been performed. For D to be liable, it **must** be proved that, but for D’s conduct, the event would not have occurred.” [emphasis added]

⁶⁷ The *presence* of ‘but for’ causation is not determinative of legal causation. The authors give the example of a dinner invitation. “But for” the dinner invitation, the victim would not have been run over on the way. But the dinner host did not “cause” the accident.

It is true that in Simester and Brookbanks, *Principles of Criminal Law* (4th ed 2012) the authors describe the “but for” test as a “rule of thumb” and suggest that the *absence* of but for causation is not determinative either. The authors give the example of an arsonist who destroys a house where, coincidentally, the electrical circuit was imminently due to overheat and cause a similar fire. But on Smith and Hogan’s analysis the “but for” test *is* satisfied here – as the fire would not have occurred *in the same way* “but for” the arson.

In civil law, in “exceptional” cases conduct may be found to be a cause even though the “but for” test is not satisfied. The exceptions arise in special cases justified on policy grounds, for example multiple concurrent causes of harm, or the creation of risk of harm (Todd *The Law of Torts in New Zealand* (7th ed 2016 at p1101)

⁶⁸ *Kuka v R* [2009] NZCA 572

“the omission will be culpable if acting “would have made a difference” (see Simester and Brookbanks Principles of Criminal Law (3rd 2007) at 75). This is usually stated as “but for” causation, which means that the omission must have been necessary, although it need not have been sufficient, to bring about the culpable result. This distinction between necessary and sufficient causes is important in cases of omissions, because the omission may not be the sole cause of the culpable result.”[emphasis added]

60. However the Court went on to note that a standard of certainty was not required: it is “impossible” to show for certain that an omission caused death, since that would entail making a claim about what would for certain have happened in “different, supposed circumstances.”⁶⁹ Ultimately the Court adopted what it described as a “stringent” standard:

“It must be demonstrated that but for an accused’s omission the victim ‘would or would probably’ not have died. The question in this case is whether that high degree of probability was established by the evidence.”

61. This analysis is not without difficulty (“probably” conventionally means more probable than not, not a “high degree” of probability). *Kuka* is also not necessarily the last word on this complex subject.
62. We acknowledge that even applying the *Kuka* formula, it may be that [REDACTED] evidence satisfies the “but for” requirement. Obviously the manner in which an expert expresses themselves is not determinative, but [REDACTED] concludes that there is a “high likelihood”⁷⁰ that the collapse would not have occurred in the absence of the design errors. However he states that this conclusion is “tempered” by the inadequate Code provisions regarding transverse column reinforcement. It is unclear to what extent this factor “tempers” the “high likelihood.”
63. Ultimately we see the “but for” test as posing a significant obstacle. The peer reviewers, as befits their status as independent experts, sound an appropriate note of caution about drawing definitive conclusions regarding the performance of individual buildings subject to extreme events. This is of central relevance to any prosecution, particularly in light of the criminal standard of proof.
64. We have not overlooked the point that this was the only building of its era to collapse in this catastrophic manner. We agree this comparison is relevant, but we do not see it as a complete answer to the causation issues (and neither did the peer reviewers). We also think the comparison is open to the criticism that it is overly narrow. Other CBD buildings of course suffered significant damage. The Pyne Gould building collapsed catastrophically and we understand it was code-compliant at the time it was built (1960s) and had additional strengthening work done in the 1990s.⁷¹ The 1980s Hotel Grand Chancellor came “close”⁷² to catastrophic collapse,

⁶⁹ At [23]

⁷⁰ [REDACTED] report p 6 under “Conclusions on Beca Findings”

⁷¹ We understand this retrofit was considered to have brought the building up to in excess of 50% of the then applicable building standard (CERC, Final Report, vol 2 The Performance of Christchurch CBD Buildings at p38)

and was for the most part well-designed and code-compliant.⁷³ We do not suggest these buildings, or their design, are similar to CTV (they are not). Rather, they illustrate [REDACTED] point⁷⁴ that in extreme events it is not unexpected for code-compliant buildings to collapse. This bears directly on the “but for” issue. It might be anticipated that any competent defence counsel would look internationally for further examples.

PUBLIC INTEREST

65. The public interest test is addressed only where the evidential test is satisfied. As set out above we are not convinced the evidential test is satisfied but we recognise the issues are not straightforward.
66. We agree with the points raised by the Crown Solicitor.
67. There is plainly strong public interest in accountability for 115 likely preventable deaths, and manslaughter is a serious offence.
68. Against this, there have been significant delays (albeit mitigated by the complexity of the issues). General deterrence is also less of an issue given the relevant Codes and practice have changed considerably since 1986. As the Crown Solicitor notes,⁷⁵ the CERC process might be seen as having facilitated at least a degree of public accountability, although victims’ groups, understandably, do not see it that way.⁷⁶
69. We also agree that, even “best case”, a non-custodial sentence may well be the result, although of course reparation may be payable. Both Dr Reay and Mr Harding are in their seventies. We understand Mr Harding is in poor health and has voluntarily ceased practice. He has also made a public apology,⁷⁷ and been publicly censured by IPENZ.⁷⁸ The outcome of disciplinary proceedings against Dr Reay is currently uncertain as the matter is before the courts. We mention this not to suggest that IPENZ proceedings provide an appropriate “alternative” to a charge of manslaughter, but because professional sanctions may be a mitigating factor.
70. One matter not discussed by the Crown Solicitor is the likely cost of proceeding to trial.⁷⁹ A precise time estimate is premature but any trial is likely to be of several months’ duration with many lay and expert witnesses. While not in itself determinative, cost is clearly relevant. How relevant is a matter for judgment but it is

⁷² CERC, Final Report, vol 2 The Performance of Christchurch CBD Buildings p50

⁷³ CERC, Final Report, vol 2 The Performance of Christchurch CBD Buildings, pp63-87. We understand that the shear wall that failed did have some non-compliance (viz. underestimation of axial load) and CERC considered the design made insufficient allowance for eccentric gravity loads (p64). However one expert considered that had the wall been designed to current standards it would have in fact collapsed (p64).

⁷⁴ [REDACTED] p6

⁷⁵ MNZ [293]

⁷⁶ Although the terms of reference did not permit CERC to inquire into questions of liability, this exclusion did not prevent an inquiry into and determination of errors or failings on the part of those involved (CERC p38).

⁷⁷ “CTV Engineer admits career over” (story by journalist Marc Greenhill 14 July 2014 at <http://www.stuff.co.nz/business/industries/10264440/CTV-engineer-admits-career-over>)

⁷⁸ Decision of the Disciplinary Committee 23 October 2014. The Committee accepted it was inappropriate to make any other disciplinary orders against Mr Harding, given the uncertainty over jurisdiction in light of Mr Harding’s resignation from IPENZ, and its own previously expressed view that it did not have jurisdiction (at paras [6.53]-[6.56]).

⁷⁹ The *Prosecution Guidelines* recognise that “prosecution resources are not limitless” (at [5.7]) and that cost is a relevant factor in the overall public interest test (at [5.11])

likely to be of greater relevance where — as here — the anticipated costs are exceptionally high, the evidential sufficiency is at best marginal, and the defendants' culpability (measured in terms of likely sentence) is not high.

71. Overall we do not see the public interest factors as requiring the prosecution of a case that, at best, will be beset with difficulty.
72. We recognise our advice will not be welcomed by the survivors of the collapse or the families of the deceased, or indeed many members of the community. We are available to meet in person with victims' groups if that would assist.

Yours sincerely
Crown Law



Brendan Horsley
Deputy Solicitor-General

