IN THE CORONERS COURT
OF VICTORIA
AT MELBOURNE

Court Reference: 2013 / 6032

FINDING INTO DEATH WITH INQUEST

Form 37 Rule 60(1)
*Section 67 of the **Coroners Act 2008***

Inquest into the Death of: PATIYA MAY SCHREIBER

Delivered On:	10 September 2015
Delivered At:	Coroners Court of Victoria 65 Kavanagh Street, Southbank
Hearing Dates:	20 & 21 July 2015
Findings of:	PHILLIP BYRNE
Representation:	Mr Dugald McWilliams for the City of Greater Bendigo Council Ms Roslyn Kaye for Ms Kristy Thomson
Police Coronial Support Unit	Acting Sergeant Remo Antolini

I, PHILLIP BYRNE, Coroner, having investigated the death of PATIYA MAY SCHREIBER

AND having held an inquest in relation to this death on 20 & 21 July 2015
at MELBOURNE
find that the identity of the deceased was PATIYA MAY SCHREIBER
born on 13 October 2009
and the death occurred on 30 December 2012
at Rosalind Park, Bendigo, Victoria
from:

1 (a) TRAUMATIC HEAD INJURY SUSTAINED BY A FALLING TREE BRANCH

in the following circumstances:

1. On 30 December 2013 Ms Kristy Thomson and her four-year-old daughter Patiya May Schreiber were in Rosalind Park, situated immediately to the west of Pall Mall in the central business area of Bendigo. They had attended at a water feature in the park known as the Cascades on the North West side of the park.

2. Shortly after 7pm, Patiya and Ms Thomson were proceeding down the pathway from the Cascades (Patiya on the sandstone retaining wall adjacent to the asphalt path), when passing under a large gum tree Ms Thomson heard a "loud crack". She looked up but saw nothing of significance. Shortly thereafter Ms Thomson heard a second "loud crack", immediately after which a large branch fell from the tree, instantly killing Patiya and seriously injuring Ms Thomson. Several members of the public, including a doctor immediately attended the scene, followed shortly thereafter by police and ambulance paramedics. The scene was secured and a crime scene established. Crime Scene Officers attended and processed the scene. Various personnel from the City of Greater Bendigo, including the acting Chief Executive Officer, the on call Works Officer and the Inspection Arborist also attended the scene.

3. In consultation with members of Victoria Police, the scene having been thoroughly processed, a decision was taken to remove the tree and fallen limb. There was a concern that the portion of the tree that remained standing was "unsound and susceptible to potential further limb collapse". For several reasons, primarily to ensure public safety, I do not consider issue could be taken with that decision.

4. Importantly, upon direction, the relevant portions of the tree were secured and transported to the City of Bendigo depot at 64 Adam Street, Bendigo to enable interested parties to inspect and examine the failed sections. Subsequently, the experts, having had access to the retained portions, did indeed carry out extensive investigations into the possible cause of the failure.

RELEVANT LAW – ROLE/FUNCTION OF THE CORONER

5. Keown v Kahn,[1] a decision of the Victorian Court of Appeal, represents a landmark judgement which, in my opinion, provided much needed guidance to Victorian (and other) coroners. His Honour Mr Justice Callaway adopting a statement contained in the report of the Brodrick Committee (UK) Report[2] said:

> *"In future the function of an inquest should be simply to seek out and record as many of the facts concerning the death as public interest required, without deducing from those facts any determination or blame."*[3]

6. Again quoting the Broderick Committee (UK) Report, His Honour noted:

> *"In many cases, perhaps the majority, the facts themselves will demonstrate quite clearly whether anyone bears any responsibility for the death; there is a difference between a form of proceeding which affords to others the opportunity to judge an issue and one which appears to judge the issue itself."*[4]

7. So while not laying or apportioning blame a Coroner should endeavour to establish the CAUSE, or CAUSES, of a death; the distinction is fine but real. As Callaway J.A. described it in Keown v Kahn:

> *"In determining whether an act or omission is a cause or merely one of the background circumstances, that is to say a non-causal condition, it will sometimes be necessary to consider whether the act departed from a norm or standard or the omission was in breach of a recognised duty, but that is the only sense in which para. (e) mandates an inquiry into culpability. Adopting the principal recommendation of the Norris Report, Parliament expressly prohibited any*

---

[1] (1999) 1 VR 69

[2] Report of the Committee on Death Certification And Coroners (1971) (UK) ("The Brodrick Report" Cmnd. 4810)

[3] (1999) 1 VR 69, 75

[4] (1999) 1 VR 69, 75

statement that a person is or may be guilty of an offence. The reasons for that prohibition apply, with even greater force, to a finding of moral responsibility or some other form of blame: the proceeding is inquisitorial; the conclusion would be more indeterminate than a conclusion about legal responsibility; and there would be no prospect of a trial at which the person blamed might ultimately be vindicated by an acquittal."[5]

8. I have found the dichotomy between finding cause of death on one hand and finding or apportioning fault, blame or culpability on the other difficult to articulate. Quite recently, in a judgement of the New Zealand Court of Appeal, I saw as good an explanation of the conundrum as I have seen. In the Coroners Court v Susan Newton & Fairfax New Zealand Ltd[6] reference is made to *Laws NZ*, Coroners. At paragraph 28 under the heading of "blame", the following statement appears:

> *"It is no part of the coroner's function to apportion blame for the death. The coroner must however be able to go beyond the mere cause of death if the coroner is to serve a useful social function, and must establish so far as is possible, the circumstances of the death. The implicit attribution of blame may be unavoidable in order for the coroner to ascertain or explain how the death occurred in the wider events that were the real cause." (my emphasis)*[7]

9. In his judgement in Keown v Kahn, Callaway J.A. referred to the Norris Report, upon which the 1985 Coroners Act was largely founded, and observed:

> *"A coroner is not concerned with questions of law of that kind. Instead the coroner is to find the facts from which others may, if necessary, draw legal conclusions."*[8]

10. In the same case His Honour Mr Justice Ormiston observed:

> *"The findings of coroners ought to eschew use of language which connotes legal conclusions as opposed to factual findings."*[9]

---

[5] (1999) 1 VR 69, 76

[6] [2006] NZAR 312

[7] [2006] NZAR 312, 320

[8] (1999) 1 VR 69, 75

[9] (1999) 1 VR 69, 70

11. Once the facts are elucidated the parties (and others) can do with them what they will. I have heard it contended that if there is no determination of criminal or civil liability what is the point of the exercise. That contention is, in my view, not only cynical, but ill founded.

12. Leaving aside the ability to make recommendations (the preventative role) the inquest provides a forum where the facts surrounding a death can be drawn out and examined. By its very nature it is inquisitorial. The coroner has an obligation, to quote His Honour Mr Justice Callaway, "to seek out and record as many of the facts as the public interest requires". Unlike some other proceedings which may flow from the same death "interested parties", who often do not have the resources, knowledge or experience themselves to pursue the facts, are entitled to be legally represented at inquest. That, of course, was not the case here where both parties were extremely well legally represented.

13. CAUSATION goes to the heart of the matter. It has been the subject of considerable judicial attention and discussion in the coronial context.

14. In Chief Commissioner of Police v Hallenstein, Hedigan J observed:

> *"The issues of causation and contribution have bedevilled philosophers for centuries and have attracted consideration by superior courts in all jurisdictions and places for more than a century. The inclination to expound, in an authoritative way, the connection between human behaviour and consequences has proved seductive. The estimation of the nature and extent of this connection may be described as the evaluation of "contribution". The law has also espoused minimalism in attempting definition of the causative or contributing effect of conduct. Nearly 50 years ago, a powerful High Court (Dixon CJ, Fullagar and Kitto JJ) described causation as "all ultimately a matter of common sense" adding for good measure that "in truth the conception in question is not susceptible of reduction to a satisfactory formula." Fitzgerald v Penn (1954) 91 CLR 268, 278.*
>
> *In E and MH March v Stramare, (1991) 171 CLR 506 the High Court of Australia considered the fundamentals of causation in the negligence context. The statements of principle in relation to causation are, in my view, applicable to the concept of contribution within the Act, is concerned with the causes of death and who contributed to it."* [10]

[10] (1996) 2 VR 1

15. In March v Stramare (supra) Chief Justice Mason observed:

> *"What was the cause of a particular occurrence is a question of fact "which must be determined by applying common sense to the facts of each particular case".*[11]

16. For an act or omission to be the cause, or one of several causes, of a death the connection between the act and/or the omission and death must be logical, proximate, and readily understandable; not illogical, strained or artificial. In theory it is a difficult and complex concept but one which, in my view, is manageable in practice.

17. I make one further comment on the relevant law. While it may be obiter, in a short judgement in Keown v Kahn, Batt J, in a timely reminder to coroners, made the following observation:

> *"Finally, I desire to make some comments with regard to the record of investigation. There is no doubt that coroners may discuss the evidence and explain their findings. But I have the impression that at any rate more contentious inquests coroner's reports have of late tended to be prolix. At least as a general rule, that is unnecessary."*[12]

18. Prolix is defined in the Shorter Oxford Dictionary variously as "of long duration", "protracted", "verbose" and "long winded". I suspect His Honour was concerned that there was a tendency developing in our court where some findings were unnecessarily lengthy, sometimes convoluted, where critical findings of fact were difficult to discover, enmeshed in minutia and other basically irrelevant background circumstances that were far removed from the causal factors that warranted attention. I always seek to heed His Honour's advice.

19. I propose in this finding to focus upon two principle issues:

- The adequacy/efficiency of the assessment on 19 September 2013 of the tree in question by Mr Daniel McWilliam, Inspections Arborist from the City of Greater Bendigo.
- The broader question of the adequacy of the informal system of tree management and risk assessment employed by the City of Greater Bendigo in relation to tree assets.

---

[11] (1991) 171 CLR 506, paragraph 17

[12] (1999) 1 VR 69, 79

20. As to this second matter, I am mindful of what was said by Nathan J in Harmsworth v The State Coroner[13]. His Honour broached the subject of the extent of coroners powers, that power is not "free ranging", but must be restricted to issues sufficiently connected with the death being investigated. His Honour stated that if not so restricted, an inquest could become wide, prolix and indeterminate. The principle was restated in R v Doogan; ex parte Lucas Smith and Ors[14]. In Doomadgee & Anor v Deputy State Coroner Clements[15], Mr Justice Muir commented that coroners are not "roving Royal Commissioners". He added:

> *"It is significant also that rules of evidence do not bind a coroners court and that it may inform itself in any way it considers appropriate. That does not mean that there are no constraints at all on coroners in relation to the gathering of evidence. The evidence relied on by the Coroner must be relevant to the matters within the scope of the coronial inquiry".*

I accept that under the 2008 Coroners Act, the scope of inquest may, to some extent, be expanded to facilitate a public health and safety imperative (see Thales Australia Ltd v Coroners Court[16]). However, I do not believe Thales Australia Ltd v Coroners Court significantly alters the fundamental principle stated in Harmsworth. In this case the second issue was clearly within the scope of my enquiry.

COURSE OF INVESTIGATION/HEARING

21. At an earlier Mention/Directions hearing, I indicated that the matter would need to go to formal inquest, commenting that the inquest would in all likelihood be a "battle of the experts". I flagged that I may well adopt a procedure being utilised of recent times, referred to as a "Hot Tub", experts giving concurrent evidence. Prior to this occurring, the experts meet together in what I termed a "conclave" at which time they consider a series of questions I had previously formulated. The object being to isolate the issues where there was difference of opinion and conversely to identify where there is agreement or common ground. It has been demonstrated previously that this process is, more often than not, of benefit to the interested parties and the Court.

---

[13] (1989) VR 989

[14] (2006) 158 ACTR 1

[15] (2005) QSC 357

[16] 2011 VSC 133

22. At the "conclave", the experts have copies of each others expert opinions and are invited to indicate what they take issue with in the other reports and the basis/bases upon which issue is taken.

23. For completeness I include in this finding the thirteen (13) questions I posed for consideration together with (at point 14) an invitation to raise any matters they, as experts, considered pertinent to my investigation.

1. *Is the species of the relevant tree agreed upon? – How old?*
2. *Is this particular species susceptible to stem/branch failure?*
3. *Would the fact that the stem that failed was approximately 18 metres long with virtually all the foliage at the end/tip of the stem make this stem more susceptible to failure?*
4. *Would the fact that at 5 – 6 metres from ground level were six (6) co-dominant stems make one or more of the stems more susceptible to failure?*
5. *Figure 3 in Mr Galwey's report purports to show the tree in question – which of the branches/stems depicted is the one that failed? Is it accepted that in fact two limbs, that remain joined, failed?*
6. *Is it agreed that there was "substantial included bark" at the union of three (3) of the six (6) co-dominant stems?; and if yes, what does that indicate as to the integrity of all or some of the co-dominant stems?*
7. *If the stem in question was of epicormic origin, as maintained by Doctor Moore and Mr Galwey, would that be obvious by a ground level inspection? – Are stems of epicormic origin less sound?*
8. *Was there decay in the failed stem? – If so, would that make the stem more susceptible to failure and would an above ground inspection have identified the decay?*
9. *What level of qualification/experience would be appropriate for an individual undertaking an inspection of trees in Rosalind Park. Do Dr Moore and Mr Ryder accept Mr Galwey's contention the in Rosalind Park an AQF Level 5 is the appropriate minimum level of qualification/experience?*
10. *Was the level of qualification/experience of Mr McWilliam sufficient for him to conduct an efficacious inspection/risk assessment?*

11. *Was there anything about the tree in question that would, on the face, warrant a more extensive examination than that carried out by Mr McWilliam some three months prior to the failure? Without the benefit of hindsight, was there any reasonable basis to suspect the tree?*

12. *Do the experts have a hypothesis as to the cause of the failure of the stem in question? – And if their opinions differ, are their hypotheses compatible?*

13. *The three experts have been provided with copies of each other's expert reports – what, if any, issues are taken by them with the other expert opinions?*

14. *Any other matters the experts consider pertinent to the Coroners investigation?*

24. The experts, whose expertise was not in question, were:

- Dr Gregory Moore – Engaged by the court as an independent expert.
- Mr Cameron Ryder of Homewood Consulting Pty Ltd – Engaged by Thomson Geer Solicitors for the City of Greater Bendigo.
- Mr David Galwey of Tree Dimensions – Engaged by Solicitors Slater and Gordon for the family.

The written reports provided by each of the experts were comprehensive.

25. I wish to address a matter that over the years has troubled me when considering whether a particular act departed from a norm or standard, or an omission was in breach of a recognised duty, so it could be reasonably viewed as a causal factor in a death under investigation. What troubles me is endeavouring to make a valid assessment excluding as best one can the not inconsiderable benefit of hindsight. I have heard it argued that to do so is nigh on impossible. How does one exclude from the consideration knowledge one already has and seek to put oneself the position of, and with the knowledge of, the person whose performance is being scrutinised.

26. In theory it is achievable, but in practical terms it is, at best, difficult and at the end of the day you often wonder whether you have successfully managed to do so. I have often described the process as "mental gymnastics". All I can say is I have assiduously endeavoured to do so in this matter. Interestingly, Dr Moore, in his report broached this subject; he wrote:

"In situations like this, where a whole tree or major limb has failed, it is very often easy to be wise after the event and with the benefit of hindsight. I have endeavoured to avoid these pitfalls in considering the specimen that I have seen and its location"

27. The difficulties in excluding hindsight from this consideration are thrown into sharp focus by the various graphic photographs tendered in evidence which demonstrate the degree of included bark and decay at the junction of the stem/trunk and the failed limb. Figure 5 at paragraph 7.2.1 of Mr Ryder's report demonstrates there was very little "holding wood" at the union of the trunk and the failed limb, making it susceptible to failure. Figures 4 and 5 at paragraph 3.7 of Mr Galwey's report also demonstrate this weakness, as do the photographs contained at pages 66 – 69 in the Coronial Brief. It has been extremely difficult to erase those images from my mind.

28. As I referred to earlier, Dr Moore, Mr Ryder and Mr Galwey gave concurrent evidence; a "hot tub". Each was sworn or affirmed and their comprehensive reports tendered in evidence, respectively exhibits 9, 11 and 12. Each agreed their reports were true and correct, and indicated there was nothing in them that they would seek to change.

29. Acting Sergeant Antolini assisting then took the witnesses through the series of questions I had formulated for the purposes of the "hot tub"; the purpose of which was to establish what matters upon which there was consensus/agreement and to isolate the areas of contention.

30. I turn to the written reports provided to the court prior to the formal hearing. I include in the findings the conclusion to Mr McWilliam's report, he wrote:

"The tree showed no outward signs visible from the ground of the usual indicators for programming of works or further inspection. These indicators include but are not limited to – observable decay, fruiting bodies, included bark with branch unions, the formation of reaction wood in response to decline in structural integrity, copious deadwood, die back or rapid decline, other structural issues, pests and disease infestations.

Through the formal and informal inspection process and the maintenance works that have been carried out on the tree (both pro-active and reactive), no obvious major structural faults were identified.

The development of the main branches suggests they were likely to be epicormic in origin. The majority of the main branches were of similar height and diameter

suggesting they were developing as co-dominate stems. The included bark and poor attachment between the stems has contributed to the failure of the branch.

The union between the failed branch and remaining stem was compromised by fungal decay possibly introduced after lopping or damage that occurred many years ago."

At paragraph 3.9 of his report Mr Galwey, accepting there was within the arboricultural profession a range of views about how hazardous a particular limb is and how likely it is to fail, wrote;

"I am satisfied that the combination of factors observable from the ground would have resulted in at least some assessing arborists to rate the subject tree's risk at a level requiring some action. No action was recommended for the tree in the two years prior to the incident, nor were the potential weaknesses described above recorded."

and;

"In my view there were sufficient signs that a large limb failure was possible or probable within the foreseeable future. The tree overhung formal pathways. The risk was sufficient to require some action. This does not necessarily mean the tree should have be removed. Further investigation of the branch unions from above would be a typical recommendation."

Dr Moore, the independent expert engaged by the court wrote at paragraph 12:

"From a ground inspection, I do not consider that it would have been possible to determine whether the tree, or particularly that part of the structure which failed, was unsound and likely to fail. The presence of limbs of epicormic origin should raise an arborist's attentiveness during an inspection, especially when there are many such limbs originating from a common source or at the same height. This is because multiple epicormic shoots (which became larger limbs) can interfere with each other's development resulting in poor attachment."

He added at paragraph 14;

"I have for many years taught arboricultural students that thorough branch and attachment inspections may require that work is done from above as well as from the ground level, as the strength of branch attachment and its integrity depends on the

condition of tissues of the up-side of the union due to the nature of the anatomy of the branch attachment. However, from the ground there was unlikely to have been any symptoms that would have triggered a request for an above ground inspection."

It must be said that in *viva voce* evidence at the formal hearing that Dr Moore seems to have retreated from that position, stating that he "would have been keen to see it from above".

THE ASSESSMENT BY THE INSPECTIONS ARBORIST

31. I turn to the crux of the matter, the principal focus of my investigation – the efficacy of the inspection of the tree by Mr McWilliam on 19 September 2013.

32. At first blush, the tree having stood apparently without incident for some 90 years, for it to fail on this day, resulting in disastrous consequences, could be categorised as "an act of God", however that simplistic explanation cannot prevail.

33. Soon after the commencement of proceedings, Mr Dugald McWilliams counsel for the City of Greater Bendigo Council, indicated that his client was disinclined to give evidence without the protection provided by section 57 of the Coroners Act 2008. I then entertained a formal request for a section 57 certificate. It was contended that if required to give evidence it may tend to prove Mr Daniel McWilliam, the Inspections Arborist, had committed an offence, or be liable to a civil penalty. Having heard the bases upon which the contention was raised, and having had the opportunity to examine the body of proposed evidence, rather than in a vacuum, I ruled there were no reasonable grounds for an objection as the prospect of prosecution or even a civil penalty being imposed was at best remote. I suspect the application represented an abundance of caution. Mr McWilliam was then called, sworn and gave evidence.

34. Mr McWilliam provided three documents to the court which were tendered in evidence;

- A statement dated 3 January 2014 (Exhibit 4)
- A statutory declaration dated 3 January 2014 (Exhibit 5)
- A comprehensive 25 page report dated 1 April 2014 (Exhibit 6)

I interpolate that having regard to his experience and qualifications, I accept that Mr McWilliam was adequately trained, experienced and qualified to undertake the inspection of the tree on 19 September 2013.

35. In his report Mr McWilliam described the methodology of the pro-active visual inspection and his conclusions as follows;

> *"The tree (Asset No. 471896) was assessed from the ground using Visual Tree Assessment (VTA) methodology as proposed by Mattheck and Breloer (1994) and others. The tree was considered to be structurally sound at the time of the inspection and presenting;*
>
> - *Fair Health and Structure*
> - *A full canopy with little deadwood or die back*
> - *No indication of the presence of pests or diseases*
> - *No outward indication of the presence of decay or other major structural faults*
> - *No works were identified or programmed at the time of inspection.*

In oral evidence Mr McWilliam maintained he had a specific recall of the inspection of the tree. Stating he spent 3 to 4 minutes making a 360 degree "walk around" looking for, among other things "risk factors". Mr McWilliam maintained in considering risk assessment, he adopted several models of assessment - QTRA, TRAQ and the relevant Australian Standard for risk assessment even though he was not following any written document. In broad terms, Mr McWilliam maintained his assertion that he viewed the tree as structurally sound, not requiring any particular work or further inspection, although he did concede that the six co-dominant stems meant that the structure was "not ideal".

36. Mr McWilliam agreed that the co-dominant stems were likely to be epicormic in nature. He also agreed that where there are six co-dominant stems with narrow forks there was a likelihood that there would be included bark, but did not see any from his ground inspection. Mr McWilliam conceded the limbs in question, as co-dominant limbs, had less taper than could otherwise be expected, which he said was "not as good as it could be". Ms Kaye put to Mr McWilliam that these aspects of the structure of the tree, in combination, should have led to further investigation. Mr McWilliam disagreed with that contention, maintaining that there were not sufficient structural faults to warrant further inspection at the time. He did however concede that while the failed limbs were not well attached to the tree "there were none of the indicators to say that failure was probable or imminent". The intention was to go back and re-inspect the tree in 12 months as part of a planned annual assessment.

37. Question 11 in the series of questions I formulated for the purposes of discussion by the experts in the "conclave" goes to the nub of the investigation; I re-produce it here:

> *"Was there anything about the tree in question that would, on the face, warrant a more extensive examination that that carried out by Mr McWilliam some three months prior to the failure? Without the benefit of hindsight, was there any reasonable basis to suspect the tree?"*

Each witness responded to the question. Mr Galwey said:

> *"I think so and I think we agreed that that would be the case based on the number of co-dominant stems coming from the one spot of the trunk, the form of the crown, long limbs extending with foliage and their ends, that there was enough looking at it to suggest that some further investigation would be required"*

Dr Moore said, when asked if he agreed with what Mr Ryder stated:

> *"Yes, I would certainly have wanted to look from above"*

In relation to that same question, Mr Ryder responded:

> *"Yes, I agree".*

He went on to say:

> *"Yes, without the benefit of hindsight and based on not having seen the tree, based on seeing it in photos and the information and inspecting the samples of the tree but in respect to the photos, yes, I would have recommended further investigation."*

Dr Moore also responding to the question, being a little more expansive, stated:

> *"Bearing in mind my interest in epicormics over a long, long time, somewhat abnormal interest I would suspect, even in the game, I'm always going to be suspicious of them and I think there are a couple of complicating matters in this case. My suspicion is that this tree was probably looking very good in 2013. I've been up to Bendigo a few times as well and Rosalind Park wasn't looking all that flash at the end of 2009, I think it would be fair to say, because we were at the end of a very long drought and a lot of the trees leafed up again and sort of improved and so while I'm saying I can't deny that I've got hindsight and the sort of things that I would be looking for, looking at those epicormics, I would be looking for included*

bark, reaction wood, any splitting, any weeping. There was none. I saw no evidence of that, okay, but I would have been keen to see it from above."

38. Mr Ryder, agreeing that the question had to be considered without the benefit of hindsight, said:

> *"I guess this is - it is hard to remove hindsight, as my two colleagues have said, and it's been something that I've probably thought about quite a lot in terms of what would have happened. I couldn't guarantee what I would have said to the tree but I think I would have had some form of action listed."*

When asked what sort of action he would have taken, Mr Ryder, said he couldn't say from the photographs, but the options were:

- Removal
- Aerial inspection
- Pruning

But stated he thought:

> *"--- there possibly would have been some form of further action"*

39. The three experts all agreed that they took no issue with each other's reports. I think it fair to say that, in broad terms, there was a significant degree of unanimity among the experts as to the questions posed. There was no "battle of the experts".

TREE MANAGEMENT PLAN

40. As to the second of the principal foci, in evidence Mr Adrian Ryan, Arboriculture Team Leader, City of Greater Bendigo, conceded no documented tree management plan existed, nor was one being developed at the time. However, he stated "proactive inspection" of all tree assets in Bendigo's major parks was planned and instigated in discussion with the Inspections Arborist, Mr McWilliam. A diary printout confirming the somewhat ad hoc arrangement was tendered in evidence (see exhibit 1). Ms Roslyn Kaye, counsel for the family submitted the ad hoc, informal arrangement of tree asset inspection did not represent an adequate risk assessment. On the other hand, Mr Dugald McWilliams counsel for the City of Greater Bendigo argued the inspection regime as arranged by Mr Ryan and Mr

McWilliam in conjunction, although not formalised nor optimal, was adequate for the purposes of risk assessment.

41. I note that the assessment program undertaken in Rosalind Park in September was for the purposes of determining what remedial works were deemed necessary with a view to them being undertaken within 12 weeks; that is prior to Christmas.

42. I have formed the view that it would have been preferable that a formal, documented, detailed tree management plan existed, incorporating, at its essence, risk assessments of tree assets, but even so that does not make an inspection regime foolproof. A well-executed, less formal regime of inspection may even provide a better result than a poorly executed inspection under a formalised tree management plan. As in many endeavours much depends on the training, experience and indeed the performance of the individual undertaking the task of inspection. In saying that, I am not for one moment suggesting such plans should not be developed and implemented; to do so would probably be viewed as "best practice". Mr Galwey, in his report, claimed it is "common practice for local councils to have written tree management plans that deal with, among other issues, risk management of council tree assets". I suspect the issue of resources bears upon the prospect of smaller, especially rural councils, developing and implementing such formalised plans.

CONCLUSIONS

43. As to the second issue of the adequacy of the tree management and risk assessment arrangements by the City of Greater Bendigo I do not conclude the lack of a formal tree management plan represents a causal factor in the death of Patiya.

44. It is with a degree of unease, because I wonder whether I have been able to reach conclusions excluding the benefit of hindsight, I have come to the view, based on the weight of evidence, that there were sufficient features of this tree in September 2013 that warranted more than a ground inspection. I have formed this view primarily based on the following specific, recognised features of potential failure:

- The six co-dominant limbs originating from the one stem.
- The six limbs having epicormic origins.
- The forks between the limbs being narrow.

- Poor taper or a long limb with foliage, mainly concentrated at its ends.

My unease was compounded by the fact that I accept that Mr McWilliam was conscientious in the execution of his duties as inspections arborist. Furthermore, in spite of Ms Kaye's contention to the contrary, I found Mr McWilliam to be a credible witness.

45. In relation to the issue of further inspection of trees that may have features that are of concern, in that they represent potential failure, the issue of resourcing to carry out above ground inspections was raised, initially by Dr Moore, and subsequently by Messrs Ryder and Galwey. As Dr Moore observed in relation to the management of tree assets "councils work with incredibly limited budgets to do the inspections". Dr Moore referred to the "old way" which involved ropes and harnesses, climbing and elevated platforms. Dr Moore estimated to undertake above ground inspections would cost in the order of $200 per tree. When one considers the number of trees most councils have responsibility for, it takes but a moment to appreciate that form of meaningful inspection is just not feasible. As the experts agreed fundamentally it comes down to prioritisation. Mr Galwey added that while that is so, typically "only a few trees out of many hundreds would warrant aerial inspection". Newer technologies are available. In his business Mr Galwey said he recently has been utilising drones, which enable above ground inspections of far more trees at far less cost. While it may sound trite, it seems to me that the critical issue of identifying the trees that warrant further examination and attention depends largely on risk assessment, which as a first step involves efficacious hazard identification.

46. Simply put there were a number of features of the tree, singularly and in combination, which, on the face, upon inspection should have raised suspicion as to its soundness and warranted "further investigation".

47. However, the matter does not end there. I have to further consider when such an overhead inspection would be undertaken, what, if anything, an overhead inspection would have revealed, and if a potential defect was demonstrated, what and when remedial action would have been taken to mitigate the prospect of failure. Those questions posed an obvious dilemma due to the simple fact that answering them involves hypothesising/speculating. However, I have expert evidence upon which I believe, on balance, enables me to come to some conclusions, albeit with the caveat of hypothesis.

48. All three experts agreed an above ground inspection would have demonstrated decay. Dr Moore opined:

"Almost certainly, the above ground inspection would have identified the decay".[17]

He added:

"--- the every likelihood too that you may have seen whether there was included bark from above and so there are a number of things you may have seen from above that point of branch production that you couldn't see from the ground".[18]

Mr Ryder agreed, as did Mr Galway, who added:

"Yes, I would have to say that it's not just the decay but the combination of decay within a fork where you've got co-dominant stems, in an area of co-dominant stems. So it's the presence of both of those that multiplies the risk in a way or multiplies the hazard and I agree that if you'd seen it from above you would have – it would have been reasonable to take action to deal with it".[19]

Dr Moore was asked whether it was "highly likely", something would have been done had an aerial inspection take place, to which her responded:

"I think so, yes, yes".[20]

49. Although, of necessity these opinions involve some degree of speculation, I am satisfied that an above ground inspection would have identified matters that would have led to a conclusion of heightened risk of failure.

50. The next question is, if these heightened risk factors had been identified, what, and when, would remedial action have been undertaken.

51. As I see it, the options are few;

- Pruning
- Removal

In considering which of these two options would have been the preferred choice, among other things, one would have to take in to account the fact that the tree was three metres adjacent to the path leading to a water feature – the Cascades, although that path is described as a relatively "low traffic" path. Dr Moore was asked:

---

[17] Transcript, p. 117.

[18] Transcript, p. 118.

[19] Transcript, p. 118.

[20] Transcript, p. 133.

"--- is your view that if that overhead inspection had taken place this tree would have ended up being removed?"

He replied:

"Not necessarily. I think what you saw from above would have definitely raised concerns about the strength of the attachment and you would have gone in to have a good look at what was going on inside as well as outside the tree and it may well have resulted in removal depending on how much decay."

Removal obviously would have eliminated the prospect of failure. As to the option of pruning, in response to a question put to him by Ms Kaye, Mr McWilliam agreed that pruning would have reduced the weight at the end of the limb and may well have reduced the likelihood of failure.

52. The next question is if, as I have found, remedial action was required when would that action, whatever it was, have been undertaken. That is a vexed question upon which the experts were not in agreement.

53. In evidence, Mr Ryan advised that the proactive annual inspection of the trees in Bendigo's major parks was scheduled so that defects identified could be programmed for attention prior to the Christmas break, when it could be anticipated there would be greater numbers of people frequenting Rosalind Park. In evidence, I understood Mr McWilliam to say that he anticipated any remedial works considered necessary would have been undertaken within a twelve week timeframe; before the Christmas period. However, all this is predicated upon when the "further investigation", the above-ground inspection, would have taken place.

54. Timeframes for "further investigation" and, if required, remedial action are critical, as the failure with tragic consequences, occurred some 14 weeks after Mr McWilliam's ground inspection. As to what would be considered reasonable to conduct the further investigation, there was a divergence of opinion between the experts. As I understood their evidence, Dr Moore and Mr Ryder considered a period of six months for the future investigation would not be unreasonable, whereas Mr Galway said:

"I think if I went past a tree six months after I'd recommended further investigation and heard that it hadn't been done yet I'd be a bit concerned. I mean the whole reason that I'd be recommending further investigation is because there's something going on that you can't tell from the ground and that's why I wouldn't be comfortable with it being six months later".

55. He went on to say it was a very difficult to put a number on it, but would "rather see it happen sooner rather than later". By way of a lay observation, it seems to me that although the situation did not on the face require urgent or immediate attention, a timeframe of 6 months, merely to undertake further investigation would be too long, even if there were a moderate risk of failure. Thereafter a timeframe for remedial action would very much depend on the result of the above ground inspection.

56. I add for completeness that I am not satisfied the wind gusts experienced in Rosalind Park during the weeks/days prior to 30 December 2013 were causal factors in the failure of the limbs in question; while reasonably strong, in the mid 70's kph, they could not be categorised as extreme. Furthermore, the weather conditions on 30 December 2013 could be categorised as reasonably benign.

57. In summary, I am satisfied:

- An above ground inspection was warranted.
- A thorough, above ground inspection, more likely than not, would have demonstrated decay and included bark.
- Some form of remedial action would have been appropriate.

58. In considering what remedial action would have been undertaken and when that action would have occurred is a vexed, but significant question. To answer those questions involves a level of speculation which is a dubious basis upon which to make an important finding. In the final analysis, such a determination depends on the finder of fact being "comfortably satisfied" as to a state of affairs. This is where I have found the issue of not invoking the benefit of hindsight, but coming to a conclusion without it very difficult. Having given the matter earnest consideration, and conceding some vacillation, I cannot say with a sufficient degree of comfort that further inspection and remedial action, whatever that may have been, would definitely have been undertaken prior to the failure which resulted in Patiya's death; speculation can only take me so far.

59. I formally find that Patiya May Schreiber died due to head injuries sustained in Rosalind Park, Bendigo on 30 December 2013 when struck by a falling limb which had, without warning, detached from a tree as she and her mother passed underneath.

COMMENTS

Pursuant to section 67(3) of the **Coroners Act 2008**, I make the following comment(s) connected with the death:

1. After the hearing of evidence I invited Dr Moore, Mr Ryder and Mr Galwey, the three experts who gave *viva voce* concurrent evidence, to provide, if they were inclined, suggested recommendations for my consideration. Subsequently, I received a letter dated 26 August 2015, signed by each of them, containing in dot point form a number of suggested recommendations jointly agreed upon. I am grateful to the three gentlemen for their assistance. A number of the issues raised in the document are more in the nature of helpful comments and I receive them as such.

2. In their recent joint letter the experts recognise, as do I, that there may well be budgetary restrains that would render some of the recommendations problematic, but none the less those responsible for tree management should strive for "best practice".

3. I include in this finding, by way of comment rather than recommendation, two excerpts from the letter of 26 August 2015:

    - The use of drones with good resolution cameras attached could allow rapid and low cost above-ground tree inspections. While not a panacea for all situations as navigating through dense and multiple close canopies may not be possible, it would be cost-effective.

    - The possible impact of climate change on canopy events should be considered by local government agencies. Under climate change scenarios for Victoria, the likelihood of more frequent major storm events and stronger wind events than in the past has been predicted for some time. Winds coming from other directions, particularly the east, and swirling have also been anticipated. Under such scenarios old trees are likely to experience greater forces from wind and storm events and from different directions than they have experienced and adapted to in the past. Such a scenario could be exacerbated by the removal of other trees that once protected a tree from prevailing wind.

RECOMMENDATIONS

Pursuant to section 72(2) of the **Coroners Act 2008**, I make the following recommendation(s) connected with the death:

I adopt the following suggested recommendations:

1. All local government agencies should have a computer-based inventory of all trees for which they are responsible, which identifies the species of the tree and its location.
2. All local government agencies should have a computer maintenance program that is linked to the inventory which provides dates and details (what was done and why) of all maintenance and inspection operations that are undertaken on the trees.
3. All local government agencies should have a computer-based risk assessment system that is applied to all trees contained within the tree inventory. Such a system may incorporate the use of systems such as QTRA or TRAQ, which are widely and readily available or another system which embodies the principles of risk assessment specified in the relevant Australian Standard.
4. All local government agencies should have a formalised tree inspection protocol, which specifies the purpose of the inspection and what form the inspection takes (e.g. walk-by Visual Tree inspection, use of technological aids in the inspection process) and whether the inspection is ground-based, or from above. The inspection record should also indicate what further arboricultural works, if any, are recommended for the tree and why these works are recommended.
5. All inspections must be undertaken by a qualified (Level 4 or above) arborist. We are generally of the view that a level 5 qualification or above is preferred, but this may not be applicable to all council-based situations at present.
6. All and any inspection and assessment protocols should be clearly dated and indicate a clear time line for the next inspection/assessment. The inspection/assessment record should also indicate what further arboricultural works, if any, are recommended for the tree and by what date in the future these should be undertaken.
7. In any tree inspection, tree assessment or risk assessment, it should be noted that the anatomy of a branch and of an epicormic shoot are quite different. The term "branch" should only be applied to tree structures that have a proper branch anatomy and epicormic shoots should be clearly identified as such in any assessment or inspection procedures.

8. All and any inspection protocols should involve components that assess the trunk and canopy components (above-ground) and root system (below-ground) of the tree. Inspection protocols should involve the use of relevant criteria that allow proper assessments against these criteria to be made at the time of inspection.

I direct that a copy of this finding be provided to the following:
Ms Kristy Thomson and her solicitor, Mr Barrie Woollacott, Slater and Gordon
The City of Greater Bendigo Council and their solicitors, Thomson Geer
Local Government Victoria, the Department of Transport, Planning and Local Infrastructure
Municipal Association of Victoria
Professor Jeremy Oats, Consultative Council on Obstetric and Paediatric Mortality and Morbidity
Senior Constable Grace Macloy, Bendigo Police Station

Signature:

PHILLIP BYRNE
CORONER
Date: ~~10~~ **September 2015**