## Chronology prepared for mediation by SOF Inc

Date	Document or investigation	Summary of document or
	(where applicable)	event
1930s		Subject Trees planted
9 & 10 December 2006	Trenching in Laman Street on Art Gallery side Opposite 4 trees	Trenching was made within the street along a line that corresponded with the edge of the theoretical root-plate. Each trench was five metres in length, i.e. 2.5 metres to either side of the centre of the base, 60 centimetres wide and 1 metre depth. The investigation found that no primary woody roots were present in any trench. The majority of trenches contained only a few woody roots, generally less than about 10mm in diameter, and few fibrous roots.  One trench only was found to contain woody roots, two roots of 20mm diameter and one of 60mm.

December 2006	Sugar Factory Report (Marsden) Investigation into Root Plate Architecture of Hill's Weeping Figs along Laman Street outside Newcastle Region Art Gallery	Methodology Exploratory Trenching outside Art Gallery 4 trees outside Gallery and 4 trees opposite  Conclusion: trees A-D are not well placed to accommodate an encroachment of the building beyond the current building lineTrees A-D would be at risk of large branch failure and windthrow should the building alone be removed Trees E-H could be retained but will require selective pruning or shortening of defective branchesTrees A-H is such that removal due to defective branch structure could become likely within 15 years should the current proposal not proceed.
8 June 2007	Major storm in Newcastle Known as "Pasha Bulka" storm	Storm was significant. Dispute exists about its effect on subject trees.

July 2007	Sugar Factory (Marsden)
	Investigation into the
	stability of 3 Hills Figs

The trees investigated were three Hill's Weeping Fig Ficus microcarpa var. hillii, tree ID numbers 4818, 4796, and 4797.

Tree #4818 located outside 41 & 43 Laman Street, while trees # 4796 and #4797 were located opposite the Newcastle Region Art Gallery on the northern side of the street...

NB Tree #4818 is not in the area of current dispute (namely between Darby and Dawson Streets)

#4818 has suffered partical windthrow

Tree #4796 (opposite Art Gallery but on other side of the road) A gap has recently opened up between the kerb and the buttressed roots, extending east from the approximate middle of the base The gap is... up to 5mm wide. Fractures are present in the kerb although the fractures are not fresh, predating the storm, and were presumably caused by the pressure of the roots expanding against the kerb. The gap indicates a windload from the southeast.....The reasons for the formation of the gap along the kerb are not clear.

6-9 July 2007		Tree # 4818 removed. This tree not in the area under dispute
2008	Treelogic Report	Trees have Useful Life Expectancies of 25-50 and over 50 years depending upon tree
2008		Council resolve to replace 2 trees cut down in subject area
February 2009		Presentation to Council by City Arborist Mr Hewett: does not recommend planting 2 new trees. Existing trees were spreading CAITY DOES THIS ENTRY REALLY HELP US????

May 2009	Briefing to Council:
	Trees have life expectancy of 5-15 years
	Council resolution that:
	Council receive an appropriately phased replacement strategy including costed options:
	a) recognise the value that mature trees bring to Laman Street
	b) preserve the canopy cover and landscape qualities of Laman Street
	c) investigate a range of risk management approaches with the view to retaining the trees for as
	long as practicably possible
	d) notes the benefits of staggering the costs over a number of years
	e) commence the growing of replacement trees

7 August 2009	Sugar Factory (Marsden) Report	The storm event that swept though Newcastle city centre in June 2007 caused the wind-throw of two of the Hill's Figs outside the Art Gallery on the southern side of the street, and lead to the removal of one of the Hill's Figs from the northern side due to severe crown imbalance and the failure of the 'wind buffering' trees from the southern side of the street.  All of the subject trees presented as being in acceptable health at the time of inspection.  Nine of the subject trees have been given a SULE rating of 3B, which is: "Trees that may live for more than 15 years but would be removed for safety or nuisance reasons". This does not mean that the trees need to be removed now.  Ideally, the trees with the shortest SULE will dictate the outcome for the entire group. The shortest SULE is category 4, remove within 5 years.
2 September 2009	Treelogic Report (Simonsen)	QTRA assessment Finding: Risk of Harm on calculations to be 1:19.8

17 November 2009:		Council Resolution: Councillors participate in a community design process using place making principles to inform the Civic Cultural Precinct Laman Street design during December 2009 - March 2010.  b Council adopts a whole-of-street replacement strategy for the Civic Cultural Precinct Laman Street to be commenced in 4th quarter 2009-10 financial year after the adoption of the street design for the precinct."  Recission motion lodged
4 December 2009	Ground Penetrating Radar undertaken by GBG Australia	

10 December 2009	Integrated Vegetation	In summary, from an
	Management	arboricultural point of view:
	Peer Review	The Visual Tree
	Anna Hopwood and	Assessment outlined within
	Andrew Simpson	the subject report has been
	•	undertaken in accordance
		with the internationally
		recognised VTA method
		formulated by Mattheck &
		Breloer (1994);
		• The subject report has
		appropriately used known
		examples of failure of the
		same species within the site
		and near by sites, and
		related these to the subject
		trees;
		• It is agreed that
		pruning is not the most
		appropriate management
		option for the trees in this
		instance;
		• It is agreed that
		cabling is not an appropriate
		management option for the
		trees in this instance;
		• It is agreed that
		'Whole of Street Removal'
		is considered the most
		effective method to remove
		and replant the subject trees.

11 December 2009	Peer Review report Arbore Report Adrian Swain	In introduction says that 2 trees failed in Laman Street.  Subject Trees are postulated to have linear root plates which are in effect defective.  Generally I am in concurrence with the reported results as presented by The Sugar Factory with the following exception; The first sentence of the third paragraph of section 7.4 Root Plate Architecture "The trees on the southern side of the street have few if any tensile roots to provide full anchorage against southerly winds," appears to be unfounded and provides no basis for the statement.
15 December 2009		The General Manager forthwith be given Council's full support to implement whatever safety measures are deemed necessary to ensure the public safety of the Laman Street precinct, apart from removing the trees.  b The General Manager report to Council by way of memo as information becomes available or as action is taken."

December 2009		Council starts implementing "safety measures" which involves closing Laman Street when wind over 50kph.
14 December 2009	Draft Report by GBG Australia (this report has not been made available)	
4 March 2010	GBG Australia Report On Ground Penetrating Radar	Modified Report says: The radar investigation has mapped a possible root system from most of the target trees. The exception to this are trees 12020, 12024, 12025 which appear to have little or no larger roots and trees 1212,12013, 12014 which have a less certain root system

19 March &20	2 day workshop on
March 2010	Laman Street,
	Community
	Council internal
	memorandum says:
	It was clear at the
	workshop that the
	majority of
	participants placed a
	high value on the
	sense of place,
	visual amenity,
	shade, heritage and
	ecological values
	provided by the
	existing Hills figs
	Community or local
	Community asked
	for photographs of failures in Laman
	Street in 2007 and
	shown pictures of
	Bruce Street Cooks
	Hill

12 March 2010	Adrian Swain Arborereport	QTRA Assessment  The calculated risk of harm is within an acceptable limit of 1/10,000 (as prescribed by the British Health and Safety Executive), however the NCC should be comfortable with the risk associated with the retention of these trees, subject to the continued implementation of the current risk management strategy.
		ROH 1/14400 provided the strategy was maintained.

1 July 2010	Arboreport (Swain)	Revised QTRA assessment  These revised calculations take into account the following:  _ Parking for extended periods (ie. 30min) and a designated loading and unloading area will be created and therefore encouraging targets into the target area.  _ Members of the public can, have and will access the target area in times of high risk.  _ Members of the public will park vehicles in the target area contrary to posted signs.  _ Vehicles need to enter the target area to make deliveries on a regular basis.  ROH 1/400
August 2010		Fencing erected around trees
August 2010		Trenching outside Baptist Tabernacle Church
August 2010		Memo to councillors advises  Based on the revised QTRA received in July 2010, Laman Street will now be closed at 5pm each evening

17 August 2010		Resolution passed by Council to remove the trees and plant replacement trees in middle of road
30 August 2010	Mark Hartley Report obtained by Caity Rashke member of SOF Inc	Substantial errors have been made in the reports that council have relied upon in making the decision to remove the Laman Street fig trees.  ROH is
17 September 2010		Parks and Playgrounds Inc obtain an injunction restraining the removal of the trees in the Land and Environment Court The legal case involves a question as to whether Council can use s88 of the Roads Act 1993 as its power to remove the trees

September 2010	TerraArk Report	n my opinion, the single
	(Freeman) obtained by	most critical error within all
	Parks and Playgrounds Inc	the reports provided to the
		NCC is the assumption that
		one or more of the figs on
		Laman Street had failed
		under wind loading ie been
		blown over during the
		severe storm on 8 June
		2007. The evidence from
		Dennis Marsden's 2007
		report and photographs
		taken on 19 June 2007
		indicated that no trees had
		been entirely blown over.
		In Marsden's 2007 report it
		is argued that evidence was
		observed to suggest at least
		three of the figs had moved
		and one of the three was
		continuing to moveI
		believe it is very likely that
		extreme loading imposed by
		wind gusts during the June
		2007 stormresulted in
		some movement in the
		interface between roots and
		the sub-grade environment
		in which they were
		growing
		I have not found any
		convincing evidence or
		argument in any of the tree
		risk assessment reports
		provided to NCC to support
		the extremely high
		probability of failure
		ascribed to the remaining
		fig trees on Laman Street
	<u> </u>	

28 September 2010	Arborviews (McKenzie) Report obtained by Parks and Playgrounds Inc	Failure of one of at least one of the fig trees in Laman Street during the June 2007 storms was only partial. The tree had moved in the ground but had not fallen over.  The removal of the fourteen fig trees is not necessary for the purpose of removing a traffic hazard.
		Detailed QTRA on each tree carried out
11 November 2010		Judge Biscoe of Land and Environment Court hands down his judgment and finds that s88 Roads Act 1993 could be used as authority to remove the trees and there was no requirement to comply with the Environmental Planning and Assessment Act if the trees are a road hazard. Judge Biscoe unable to comment on the merit of Council's opinion as to road hazard

Council retain the 14 fig trees in Laman St Cooks Hill

- 2. Council implements alternative risk mitigation, monitoring and tree management strategies including:
- a) Transform Laman St permanently to a one way street
- b) Keep warning signs
- c) Prevent parking near the base of trees and on exposed roots.
- *d) Mulch around the base of trees*
- e) Encourage aerial root growth
- f) Adopt a monitoring regime of:
- i) Two weeks initial monitoring
- ii) Followed by a further two week periods until significant winds
- iii) Monitoring on a six month basis for 18 months
- iv) And then once a year
- v) Or after an extreme weather event
- vi) Action taken from an OH&S perspective
- 3 Council notes that the ongoing management and assessment of the Laman St trees needs to be conducted from both a tree preservation and a health

preservation and a health and safety perspective by a qualified organisation with a proven tree preservation

14 January 2011		ENSPEC visit Laman Street and advise re methodology of dynamic testing
14 March 2011	Working Party	Applications close for Laman Street working party participants
20 April 2011	Working Party	First meeting of Working Party
3 May 2011	Working Party	2nd meeting of Working Party
May –June 2011		Quote obtained from ENSPEC for \$25,000 Council memorandum suggests cost is \$100,000
		Working Party resolves not to proceed with dynamic testing

1 June 2011Working Party3<sup>rd</sup> meeting of Working Party John Johnston goes through Memo: <u>Council Resolution</u> ""the following is an update on the progress to date with implementation of the Council resolution of 14 December 2010..." eg. "..e)Encourage aerial root growth. **Progress**. No Progress to date. Hills Figs growing in the environment rarely produce aerial roots...While some Hills Fig in Newcastle have developed aerial roots this is the exception and not a common occurrence. Humidity and soil moisture in the Laman Street cultural precinct are not conducive to the production of aerial roots."

1 3		
22 June 2011	Working Party	Working Party
		Extraordinary 4 <sup>th</sup> meeting.
		Discussion of Statewide
		position
26 June 2011	Working party workshop	Focus on lopping and
		pruning the trees

7 July 2011	Working Party	Page 5 of minutes: 'The assessments had been undertaken by respected arborists who had completed numerous QTRA assessments and whilst acknowledging concerns about the assessment process, further commissioning of reports would bring into question the abilities of those arborists, and itwas unclear that the outcomes of any further investigation would improve Council's position'
14 July 2011	Working Party	5th meeting of Working Party
18 July 2011	Internal Memo	Frank Cordingley States that QTRA only one method Other methods are Physical assessment Matheny & Clark Case Book histories
July 2011	Treelogic Report	Trees have useful life expectancy of zero
19 July 2011		Council resolves to remove the trees Recission motion
4 August 2011		Council resolves to proceed to mediation