#### TERMS OF REFERENCE A: DIMINUTION OF SOCIAL AMENITY

- Loss of community gathering places and streets/paths for cycling & walking
- · Loss of shade & comfort & sense of place
- Impact on health & well-being (air quality & heat related morbidity)
- Impact of loss of trees on rise in water table in flood-prone area

#### TERMS OF REFERENCE B: APPROPRIATENESS & ADEQUACY OF FINANCIAL COMPENSATION

- Compensation due to breach of contract re tree protection
- \$ Value of large trees
- 10 year Arboriculture Maintenance program

# Document tendered by Saving Sydrey Trees Received by Breat Lodgers Date: 20 / 8 / 18 Resolved to publish (Pe) / No

#### TERMS OF REFERENCE C: EFFECTIVENESS OF THE GOVERNMENT'S COMMUNICATION WITH RESIDENTS

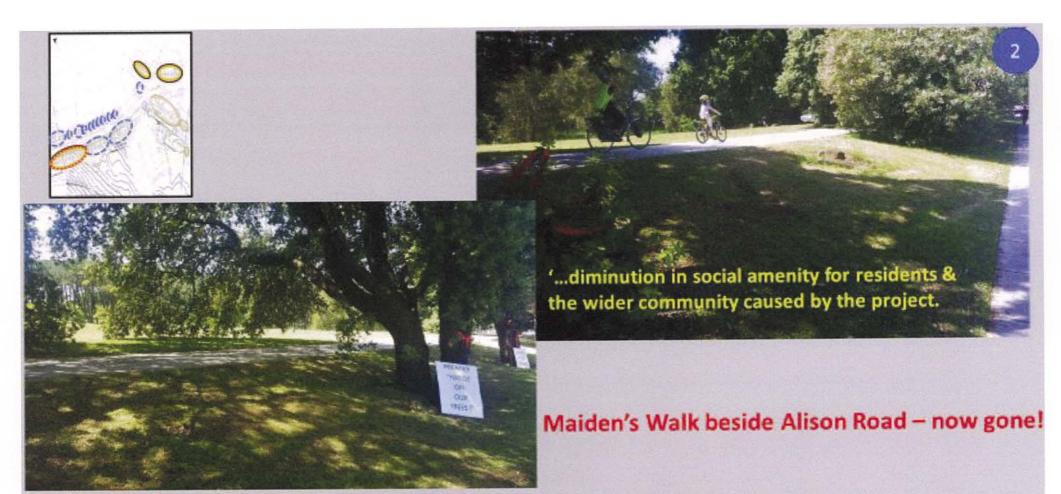
- Redacted GIPA
- Response to public meetings

#### **TERMS OF REFERENCE D: OTHER MATTERS**

· Contract procedural issues



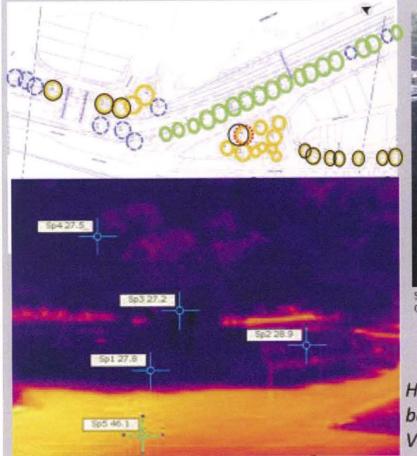
Saving Sydney's Trees Response to the Inquiry into the CSELR 2018

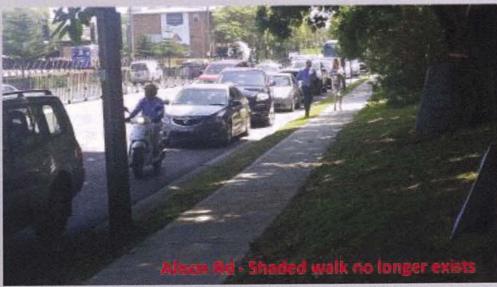




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Terms of Reference A: Compensation due to loss of community recreation spaces





Source: Micro-Urban-Climatic Thermal Emissions: In a Medium-Density Residential Precent, City Futures Research Centre, UNSW

Heat Image indicates **enormous** daytime difference (about 18C) between radiant temperature of paved walkway & shade under tree in Victoria Park



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ToR, A: Compensation due to loss of shade & potential heat-related morbidity

Urban trees, climate and health http://ehia.curtm.edu.au/projects/climatechange.cfm

Impact on
Health &
Well-being
due to loss
of trees in
public
space

Temperature Range (°C)	Effects	Potential outcomes
20 - 27°C	Comfort Zone	Maximum efficiency
As temperature Increases	Discomfort:  Increased irritability  Loss of concentration  Loss of efficiency in mental tasks	Mental Problems
	Increase of errors:  • Loss of efficiency in mental tasks • More incidents	Psycho-physiological problems
	Increase problems doing heavy work: Disturbed water and electrolyte balance Heavy load on heart and circulation Fatigue and threat of exhaustion	Physiological problems
35 - 40°C	Limit of high temperature tolerance	





### **Problems and Symptoms caused by Hot Temperatures**

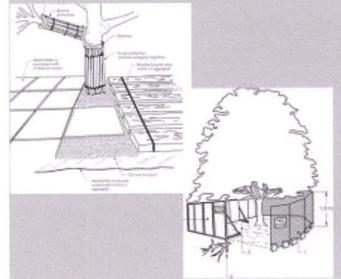


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Terms of Reference A: Compensation due to loss of shade & potential heat-related morbidity

Arboricultural Impact Assessment by KMH Environmental Pty Ltd, Oct 2015, revision 4

Appendix A: Compliance Matrix



Note non-compliance
of branch protection
and tree root
compaction
with heavy vehicle
movement & storage
of material within the
TPZ root zone

MCoA B47B: Proponent shall employ construction techniques that <u>minimise</u> impacts to tree root zones at all times along Anzac Parade (its intersection with Alison Road), Alison Road and Wansey Road, including but not limited to those identified in environmental management measure T4 within table 4.2 of the Modification Report..





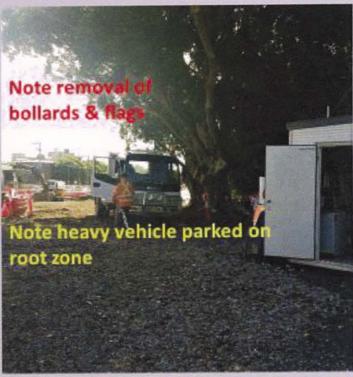
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Terms of Reference B: Compensation due to breach of contract re tree protection

These 2 trees were issued a DO NOT TOUCH order which included their roots in the Consent Conditions (B47)

Clearly there was no intention to comply with B48 and B47 by ACCIONA or TfNSW.





"Tree Protection Zone fence should be located on a radius of 5.5M from the centre of the trunk. The TPZ can be contained by plastic bollards and connected with high visibility plastic tape. The base plates of the bollards should be pegged to the ground to prevent the line marking of the TPO from being altered." Arboricultural Impact Assessment Revision 7, 25/8/16, page 3



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ToR B: Compensation due to breach of contract re tree protection



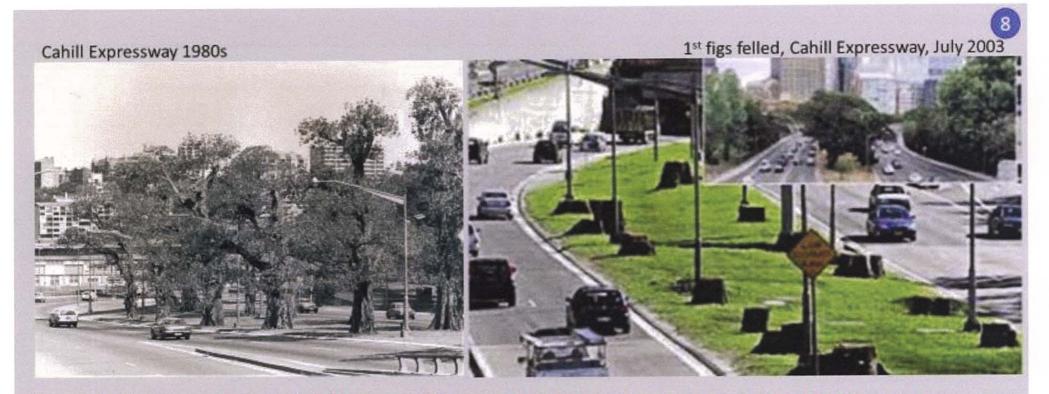
The orange plastic poles that demarcate the TPZ (Tree Protection Zone) have been moved inside the actual TPZ. The UTM Audit report, in all instances, indicates TPZ's are compliant.

We question the reliability of these statements when evidence indicates the moving of these barricades for vehicle parking at will. The Bulldozer working with in reach of the overhead limbs. This machine was witnessed impacting these limbs.



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ToR B: Compensation due to breach of contract re tree protection



Cahill Expressway - Ultimate ENDGAME due to root and branch damage



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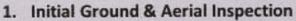
Compensation to ensure adequate care & avoid loss of remaining trees

# **Estimate for Remedial Tree works for CSELR Impact**

Total \$10,920.00 per tree

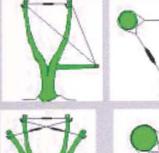
800 trees = \$8,736,000.00 per year

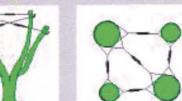
10 year contract = \$80,736,000.00



- 2. Arboricultural Impact Assessment (AIA)
- 3. Root Mapping & Remediation
- 4. Bracing weakened branches by Cobra method
- 5. Selective pruning
- 6. Insect control
- 7. Fertilising & Weed Control
- 8. Electronic Monitored Irrigation







**Best Practice Tree Management** 

cobra - dynamic tree support system specially designed to be strong, gentle, flexible and shock-absorbing resulting from scientific research.



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TERMS OF REFERENCE B: APPROPRIATE FINANCIAL COMPENSATION

# Green Infrastructure for Cities -It's all about trees!!!

Amount of solar radiation canopy intercepts relates to canopy size, type and angle of leaves, depth & density of the canopy layers.

Tree attributes providing best shade include leaf area, high branching density, multiple canopy layers, canopy transmissivity, canopy size and projection and canopy ventilation.



## Sydney's wonderful figs provide all the attributes needed.

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Terms of Reference, B: Compensation to ensure health of remaining trees