

# Arboricultural Impact Assessment



## Prepared For

██████████ – Environment Co-ordinator  
CPB Contractors, Dragados and Samsung C&T Joint Venture (CDS-JV)  
30 Garema Ct  
KINGSGROVE NSW 2208

## Site Address

Westconnex New M5  
Variable Message Sign Installation  
118 Euston Road  
ALEXANDRIA NSW 2015

## Prepared by

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*CDS reference: M5N-ES-RPT-LRW-0052-00*

FINAL

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**April 2019**

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# 1 Introduction

## 1.1 Brief

This Arboricultural Impact Assessment (AIA) was prepared by Treeism Arboricultural Services and was commissioned by [REDACTED] of CPB Contractors, Dragados and Samsung C&T Joint Venture (CDS-JV).

The proposed works are part of the larger WestConnex New M5 project. The scope of work specifically is tree removal to allow the installation and clear vision of the proposed Variable Message Sign (VMS) at CH 2710 (118 Euston Road, Alexandria -eastern verge). The tree is located on adjoining property and half of the tree overhangs the VMS location.

Care has been taken to obtain all information from reliable sources. All data has been verified as far as possible; however, I can neither guarantee nor be responsible for the accuracy of information provided by others.

This report is not intended to be a comprehensive tree risk assessment; however, the report may make recommendations, where appropriate, for further assessment, treatment or testing of trees where potential structural problems have been identified, or where below ground investigation may be required.

This AIA is not intended as an assessment of any impacts on trees by any proposed future development of the site, other than the current discussed scope of work.

The purpose of this report is to assess the vigour and condition of the trees, and identify the potential impacts the proposed development may have on those trees to be retained in proximity to the works.

The author of this report holds an AQF Level 5 Diploma of Horticulture (Arboriculture) and has 26 years in the horticultural industry. 21 of these 26 years have been specifically within the field of arboriculture.

Previous roles varied from working actively as a tree climber in private contracting companies to Tree Management Officer at several local Councils and working with independent Consultants. The author is independent from the project.

This AIA has been commissioned to ensure compliance with the requirements set out by the Department of Planning and Environment (DPE) as per Condition B63 - Table 1 (below/next page).

**Table 1** –Condition of Approval B63 Compliance Table

<b>Condition</b>	<b>Requirement</b>	<b>Addressed in:</b>
B63	The Proponent must commission an independent experienced and suitably qualified arborist, to prepare a comprehensive Tree Report(s) prior to removing any trees on the periphery and/or outside the construction footprint as identified in the figures in Section 6 of the document referred to in condition A2(b), including any tree(s) removed along Euston Road. The Tree Report may be prepared for the entire SSI or separate reports may be prepared for individual areas where trees are required to be removed. The report(s) must identify the impacts of the SSI on trees and vegetation within and adjacent to the construction footprint. The report(s) must include:	This Report – Observation & Discussion & individual area as per Appendix H.
B63 (a)	a visual tree assessment with inputs from the design, landscape architect, construction team;	VTA noted in Appendix H & staff inputs as per Appendix D and onsite discussions.
<b>Condition</b>	<b>Requirement</b>	<b>Addressed in:</b>

B63 (b)	consideration of all options to amend the SSI where a tree has been identified for removal, including realignment, relocation of services, redesign of or relocation of ancillary components (such as substations, fencing etc.) and reduction of standard offsets to underground services; and	Appendix D, onsite discussion.
B63 (c)	measures to avoid the removal of trees or minimise damage to existing trees and is to ensure the health and stability of those trees to be protected. This includes details of any proposed canopy or root pruning, excavation works, site controls on waste disposal, vehicular access, storage of materials and protection of public utilities.	N/A
B63	A copy of the report(s) must be submitted to the Secretary for approval prior to the removal, damage and/or pruning of any trees, including those affected by site establishment works. All recommendations of the report must be implemented by the Proponent, unless otherwise agreed by the Secretary.	No tree removal, damage and/or pruning will occur to the subject trees prior to the Secretary's approval of this report.

## 1.2 Methodology

In preparation for this report, ground-level, visual tree assessment (VTA) <sup>1</sup>, or limited VTA (e.g. where access was limited), were completed by the author of this report on 14<sup>th</sup> March 2019. Inspection details of these trees are provided in Appendix H — Schedule of Assessed Trees.

The tree height was measured using a Nikon Forestry Pro, and unless otherwise noted in Appendix H, the trunk Diameter at Breast Height were measured at 1.4 metres above ground level (DBH) using a diameter tape. Tree canopy spread was stepped out with field observations written down, and photographs of the site and tree was taken using an iPhone 6.

No aerial inspections, root mapping or woody tissue testing were undertaken as part of this tree assessment. Information contained in this report only reflects the condition of the trees at the time of inspection.

Trees are dynamic, living things which can be subject to change without notice in certain circumstances.

Plans and documents referenced for the preparation of this report include:

- AS4970-2009 Protection of trees on development sites, Standards Australia;
- Conditions B63 – (Table 1);
- Marked up aerial map of site layout, see Appendix E – Site Mark Up with CCTV and Over Height Locations;
- Excerpts of Euston Road Tree Report (Rev 8) no. M5N-ES-RPT-LRW-0006-08, authored by Australian Tree Consultants (ATS).
- Marked up aerial map of tree location, see Appendix F – Tree Location Plan.

## 1.3 Tree Preservation and Management Guidelines

The proposed works form part of the approved WestConnex New M5 State Significant Infrastructure project (SSI 6788), which overrides the State Environmental Planning Policy (Vegetation in Non-Rural Areas) 2017 'Vegetation SEPP' (which refers to prescribed and non-prescribed trees pursuant to the City of Sydney Development Control Plan 2012 (CoSDCP) Section 3.5.3).

<sup>1</sup> Visual Tree Assessment (VTA) is a procedure of defect analysis developed by Mattheck and Breloer (1994) that uses the growth response and form of trees to detect defects.

What constitutes a 'tree' as per planning approval is any tree that:

- is equal to or greater than three (3) metres in height; or
- for a single trunk species, a trunk circumference of 300 millimetres at a height of one metre above ground level; or
- for a multi-trunk species, a trunk circumference exceeding 100 millimetres at a height of one metre above ground level.

However, this excludes any species listed under the Biosecurity Act 2015 (this Act overrules Noxious Weed Act 1993).

## 2 Observations and Discussion

### 2.1 Site Discussion

The VMS board (and ITS services) were originally proposed to be located at CH2300 (166 Euston Rd, Alexandria) however the pile footing and ITS services clashed with existing utilities within this eastern verge (power, high pressure gas, communication). CDS-JV requested to change the location of the VMS footing and ITS systems to CH2710 which was approved by the Independent Certifier on 21/11/2018 (RFI Reference M5N-RFI-CDS-04875).

The high-pressure gas in this location was diverted for the construction of the Munni St Drain. This allowed the VMS footing to be wedged between the power and communication lines.

The subject tree interferes with the line of sight for the Close Circuit Television (CCTV) located at Euston Road/Sydney Park Road intersection to check what is displayed on the board.

RMS specifications require the VMS to be at least 95m away from the Over Height Detection (located at CH2815). The Over Height Detection identifies vehicles which exceed the height of St Peter's Interchange and New M5 tunnel and communicates the warning to the VMS board. At 95m, the driver has sufficient time to read any warning messages on the VMS board and take an alternative route before entering the tunnels via St Peters Interchange.

Options to amend the design have been considered however given the volume of new and existing utilities on Euston Road, it is not feasible to refine the siting of the VMS further.

### 2.2 Summary of Assessed Tree

One (1) tree was assessed and included in this report. Details are included in the Schedule of Assessed Trees – Appendix H.

The subject tree was originally assessed by Australian Tree Consultants (ATS) and numbered A1 65 within report titled *Euston Road Tree Report (Rev 8)* and numbered M5N-ES-RPT-LRW-0006-08.

A1 65 is a Red Ironbark, ascribed a High Retention Value (RV – see Appendix C).

The tree bifurcates at five (5) metres above ground level into almost equal diameter stems, one of the stems (the northern stem) overhangs the location of the VMS and requires removal to allow installation and clear vision from CCTV located at Euston Road/Sydney Park Road intersection.

Whilst in some cases, removal of co-dominant stems can be carried out without detriment to the tree, it is my opinion, given the subject tree form and weight distribution along these two stems, removal of one stem will significantly affect the stability of this tree.

It is likely, in my opinion, that during or following an extreme weather event, tree failure may occur should the subject branch/stem be removed.

This is due to the fact that the majority of the weight is distributed to the upper canopy of the subject tree, and the tree's natural form. Previous lower lateral branch removal (not known to be related to New M5 works) also contributes to the higher risk of failure.

As such, whilst the whole tree is not affecting the placement of the VMS or the visibility issue of the CCTV, tree removal is the safest option, in my opinion.

### 2.3 Threatened Species

The assessed tree is not subject to threatened conservation status under Australian and/or State Government legislation (i.e. NSW Biodiversity Conservation Act 2016 and the Commonwealth Environment Protection and Biodiversity Conservation Act 1999).

## 3 Recommendations

### 3.1 Tree Removal

Tree removal shall be carried out to comply with Workcover Code of Practice *Amenity Tree Industry* 1998.

Ideally the mulch from the tree removal is to be reused within the subject site. Replanting will be undertaken in accordance with Conditions B63A-B63C.

## 4 References

Mattheck, C. & Breloer, H. (1994) *The Body Language of Trees: A handbook for failure analysis. Research for Amenity Trees No. 4*, The Stationery Office, London.

Standards Australia AS4373-2007: *Pruning of Amenity Trees*, Standards Australia, Sydney.

Hadlington, P. & Johnston, J. (1988) *Australian Trees: Their Care & Repair*. University of NSW Press, Kensington.

Standards Australia AS4970-2009 *Protection of trees on development sites*, Standards Australia, Sydney.

Barrell, J (1995) *Pre-development Tree Assessment from Trees and Building Sites*, Eds. Watson & Neely, International Society of Arboriculture, Illinois.

Report prepared by [REDACTED] – March/April 2019.



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Tree Surgery Certificate

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Member of the International Society of Arboriculture (ISA)

ISA Tree Risk Assessment Qualification (TRAQ) 2016

## 5 Appendices

### Appendix A – Terms and Definitions

**Aerial inspection:** where the subject tree is climbed by a professional tree worker/ arborist (typically AQF Level 3) specifically to inspect and assess the tree for signs of symptoms of defects, disease, etc.

#### Age classes

- Y** Young refers to an established but juvenile tree.
- SM** Semi-mature refers to a tree at growth stages between immaturity and full size.
- EM** Early-mature refers to a tree close to full sized still actively growing.
- M** Mature refers to a full sized tree with some capacity for further growth.
- LM** Late-Mature refers to a full sized tree with little capacity for growth that is not yet about to enter decline.
- OM** Over-Mature refers to a full sized tree with little capacity for growth that is entering or has entered decline.

**Co-dominant:** refers to stems or branches equal in size and relative importance.

**Condition/Structure:** refers to the tree's form and growth habit, as modified by its environment (aspect, suppression by other trees, soils) and the state of the scaffold (i.e. trunk and major branches), including structural defects such as cavities, crooked trunks or weak trunk/branch junctions. These are not directly connected with health and it is possible for a tree to be healthy but in poor condition/structure.

**Deadwood:** refers to any whole limb that no longer contains living tissues (e.g. live leaves and/or bark). Some dead wood is common in a number of tree species.

**Diameter at Breast Height (DBH):** Refers to the tree trunk diameter at breast height (1.4 metres above ground level).

**Epicormic growth:** adventitious branches that are considered to be a weak attachment in the short term due to minimal wood formation. There are generally formed following storm-related branch breakage or poor pruning practices. Should sufficient holding wood form in the long-term this growth is less of an issue.

**Hazard:** refers to anything with the potential to harm health, life or property.

**Health:** Refers to the tree's vigour as exhibited by the crown density, leaf colour, presence of epicormic shoots, ability to withstand disease invasion, and the degree of dieback.

**Inclusion stem/bark:** the pattern of development at branch or stem junctions where bark is turned inward rather than pushed out. This fault is located at the point where the stems/branches meet. This is normally a genetic fault and potentially a weak point of attachment as the bark obstructs healthy tissue from joining together to strengthen the joint.

**Scaffold branch/root:** a primary structural branch of the crown or primary structural root of the tree.

**Secondary Stem:** refers to stems or branches with one of unequal size and relative importance.

**SRZ:** refers to the Structural Root Zone of the tree, this is the area required for tree stability.

**TPZ:** refers to the Tree Protection Zone of the tree, this is the primary method of protecting trees, it is a combination of the root area and the canopy and the SRZ is located within it.

**Visual Tree Assessment (VTA):** a procedure of defect analysis developed by Mattheck and Breloer (1994) that uses the growth response and form of trees to detect defects.



## Appendix B – ULE Guide

ULE categories (after Barrell 1996, Updated 01/04/01)

The five categories and their sub-groups are as follows:

1. Long ULE - tree appeared retainable at the time of assessment for over 40 years with an acceptable degree of risk, assuming reasonable maintenance:
  - a) Structurally sound trees located in positions that can accommodate future growth
  - b) Trees which could be made suitable for long term retention by remedial care
  - c) Trees of special significance which would warrant extraordinary efforts to secure their long-term retention
2. Medium ULE - tree appeared to be retainable at the time of assessment for 15 to 40 years with an acceptable degree of risk, assuming reasonable maintenance:
  - a) Trees which may only live from 15 to 40 years
  - b) Trees which may live for more than 40 years but would be removed for safety or nuisance reasons
  - c) Trees which may live for more than 15 years but would be removed to prevent interference with more suitable individuals or to provide space for new planting
  - d) Trees which could be made suitable for retention in the medium term by remedial care
3. Short ULE - tree appeared to be retainable at the time of assessment for 5 to 15 years with an acceptable degree of risk, assuming reasonable maintenance:
  - a) Trees which may only live from 5 to 15 years
  - b) Trees which may live for more than 15 years but would be removed for safety or nuisance reasons
  - c) Trees which may live for more than 15 years but would be removed to prevent interference with more suitable individuals or to provide space for new planting
  - d) Trees which require substantial remediation and are only suitable for retention in the short term.
4. Removal - trees which should be removed within the next 5 years:
  - a) Dead, dying, suppressed or declining trees because of disease or inhospitable conditions
  - b) dangerous trees through instability or recent loss of adjacent trees
  - c) Dangerous trees because of structural defects including cavities, decay, included bark, wounds or poor form
  - d) Damaged trees that are clearly not safe to retain
  - e) Trees which may live for more than 5 years but would be removed to prevent interference with more suitable individuals or to provide space for new planting
  - f) Trees which are damaging or may cause damage to existing structures within the next 5 years
  - g) Trees that will become dangerous after removal of other trees for the reasons given in (a) to (f)
  - h) Trees in categories (a) to (g) that have a high wildlife habitat value and, with appropriate treatment, could be retained subject to regular review
5. Small, young or regularly pruned - Trees that can be reliably moved or replaced:
  - a) small trees less than 5m in height
  - b) young trees less than 15 years old but over 5m in height
  - c) formal hedges and trees intended for regular pruning to artificially control growth

## Appendix C – STARS - 1 of 2

### Significance of a Tree Assessment Rating System (IACA 2010)© (1 of 2)

The landscape significance of a tree is an essential criterion for establishing the importance that a particular tree may have on a site. However, rating the significance of a tree becomes subjective and difficult to ascertain in a consistent and repetitive fashion due to assessor bias. It is therefore necessary to have a rating system utilising structured qualitative criteria to assist in determining the retention value for a tree.

This rating system will assist in the planning processes for proposed works, above and below ground where trees are to be retained on or adjacent a development site. The system uses a scale of *High*, *Medium* and *Low* significance in the landscape. Once the landscape significance and *Useful Life Expectancy* of an individual tree has been defined, the retention value can be determined.

#### **Tree Significance - Assessment Criteria**

##### **1. High Significance in landscape.**

- The tree is in good condition and good vigour;
- The tree has a form typical for the species;
- The tree is a remnant or is a planted locally indigenous specimen and/or is rare or uncommon in the local area or of botanical interest or of substantial age;
- The tree is listed as a Heritage Item, Threatened Species or part of an Endangered ecological community or listed on Councils significant Tree Register;
- The tree is visually prominent and visible from a considerable distance when viewed from most directions within the landscape due to its size and scale and makes a positive contribution to the local amenity;
- The tree supports social and cultural sentiments or spiritual associations, reflected by the broader population or community group or has commemorative values;
- The tree's growth is unrestricted by above and below ground influences, supporting its ability to reach dimensions typical for the taxa *in situ* - tree is appropriate to the site conditions.

##### **2. Medium Significance in landscape.**

- The tree is in fair-good condition and good or low vigour;
- The tree has form typical or atypical of the species;
- The tree is a planted locally indigenous or a common species with its taxa commonly planted in the local area;
- The tree is visible from surrounding properties, although not visually prominent as partially obstructed by other vegetation or buildings when viewed from the street;
- The tree provides a fair contribution to the visual character and amenity of the local area;
- The tree's growth is moderately restricted by above or below ground influences, reducing its ability to reach dimensions typical for the taxa *in situ*.

##### **3. Low Significance in landscape.**

- The tree is in fair-poor condition and good or low vigour;
- The tree has form atypical of the species;
- The tree is not visible or is partly visible from surrounding properties as obstructed by other vegetation or buildings;
- The tree provides a minor contribution or has a negative impact on the visual character and amenity of the local area;
- The tree is a young specimen which may or may not have reached dimension to be protected by local Tree Preservation orders or similar protection mechanisms and can easily be replaced with a suitable specimen;
- The tree's growth is severely restricted by above or below ground influences, unlikely to reach dimensions typical for the taxa *in situ* - tree is inappropriate to the site conditions;
- The tree is listed as exempt under the provisions of the local Council Tree Preservation Order or similar protection mechanisms;
- The tree has a wound or defect that has potential to become structurally unsound.

##### **Environmental Pest / Noxious Weed Species:**

- The tree is an Environmental Pest Species due to its invasiveness or poisonous/ allergenic properties;
- The tree is a declared noxious weed by legislation.

##### **Hazardous/Irreversible Decline:**

- The tree is structurally unsound and/or unstable and is considered potentially dangerous;
- The tree is dead, or is in irreversible decline, or has the potential to fail or collapse in full or part in the immediate to short term.

## Appendix C – STARS - 2 of 2

Significance of a Tree Assessment Rating System (IACA 2010)© (2 of 2)

The tree is to have a minimum of three (3) criteria in a category to be classified in that group.

Note: The assessment criteria are designed for individual trees only but can be applied to a monocultural stand in its entirety e.g. hedge.

In the development of this document IACA acknowledges the contribution and original concept of the Footprint Green Tree Significance & Retention Value Matrix, developed by Footprint Green Pty Ltd and Andrew Morton in June 2001.


		Significance				
		1. High	2. Medium	3. Low		
		Significance in Landscape	Significance in Landscape	Significance in Landscape	Environmental Pest / Noxious Weed Species	Hazardous / Irreversible Decline
Estimated Life Expectancy	1. Long >40 years					
	2. Medium 15-40 Years					
	3. Short <1-15 Years					
	Dead					
<p><u>Legend for Matrix Assessment</u></p> <div style="text-align: right;">  </div>						
	<p><b>Priority for Retention (High)</b> -These trees are considered important for retention and should be retained and protected. Design modification or re-location of building/s should be considered to accommodate the setbacks as prescribed by the Australian Standard AS4970 <i>Protection of trees on development sites</i>. Tree sensitive construction measures must be implemented e.g. pier and beam etc if works are to proceed within the Tree Protection Zone.</p>					
	<p><b>Consider for Retention (Medium)</b> -These trees may be retained and protected. These are considered less critical; however their retention should remain priority with removal considered only if adversely affecting the proposed building/works and all other alternatives have been considered and exhausted.</p>					
	<p><b>Consider for Removal (Low)</b> -These trees are not considered important for retention, nor require special works or design modification to be implemented for their retention.</p>					
	<p><b>Priority for Removal</b> -These trees are considered hazardous, or in irreversible decline, or weeds and should be removed irrespective of development.</p>					

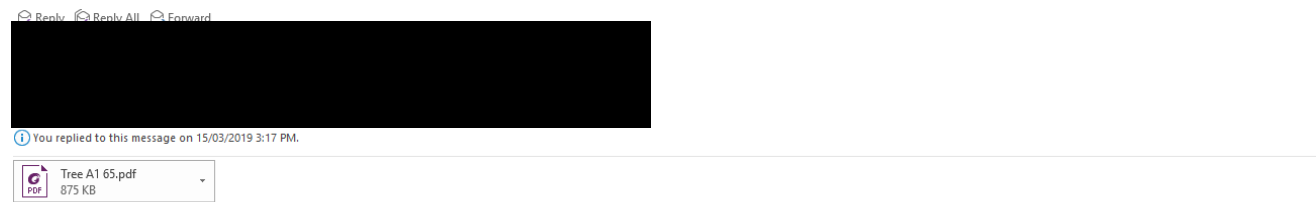
Table 1 - Tree Retention Value - Priority Matrix.

IACA, 2010, *IACA Significance of a Tree, Assessment Rating System (STARS)*, Institute of Australian Consulting Arboriculturists, Australia, [www.iaca.org.au](http://www.iaca.org.au)

## Appendix D – Record of Meetings and Design Input

██████████ attended the site inspection on 14/03/2019 with design input.

No input from the Landscape Architect has been included as these works are not constrained by any urban design or landscaping requirements.



Hi ██████████

Regarding the tree along Euston Road, I've identified it as A1 65 in the original Euston Road Tree Report (rev 8) M5N-ES-RPT-LRW-0006-08

No	Botanical name	Retention value	Tree Location	Encroachment into TPZ		Cause of encroachment	Proposed outcome	Reason for proposed outcome	
A1 65	<i>Eucalyptus sideroxylon</i>	High	Adjacent to footprint	Major	>10%	Construction	Retain	To be retained through implementation of non-destructive construction and/or tree protection.	
A1 65	<i>Eucalyptus sideroxylon</i>	16	10	500	6	2.5	Good	Good	151.188666, -33.909757

The low hanging branch:

- (a) Restricts the installation of the VMS (Variable Message Sign) pole and board
- (b) Restricts the visibility of the board

History of the VMS board and ITS along Euston Road (eastern verge):

- Originally VMS and ITS services were at CH2300
- The pile footing and ITS services clashed with existing services in the eastern verge (power, high pressure gas, communication).

CDSJV requested to change the location of the footing of VMS and ITS systems to CH2710. The high pressure gas in this location was diverted for the construction of Munni St Drain. This meant that there was more room for the footing to be wedged between the power and communication lines. Please see attached map.

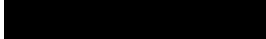
Other things CDSJV had to consider when installing this footing was:

- VMS has to have line of sight to the CCTV (located at Euston Road/Sydney Park Road intersection) to check what is displayed on the board.
- RMS specifications require the VMS must be at least 95m away from the Over Height Detection (CH2815). The Over Height Detection identifies vehicles which exceed the height of St Peter's Interchange and New M5 tunnel and communicates the warning to the VMS board. At 95m, the driver has sufficient time to read any warning messages on the VMS board.

If you have any questions, give me a call.



Level 6, Building B, 197-201 Coward Street, Mascot, NSW, 2020, Australia



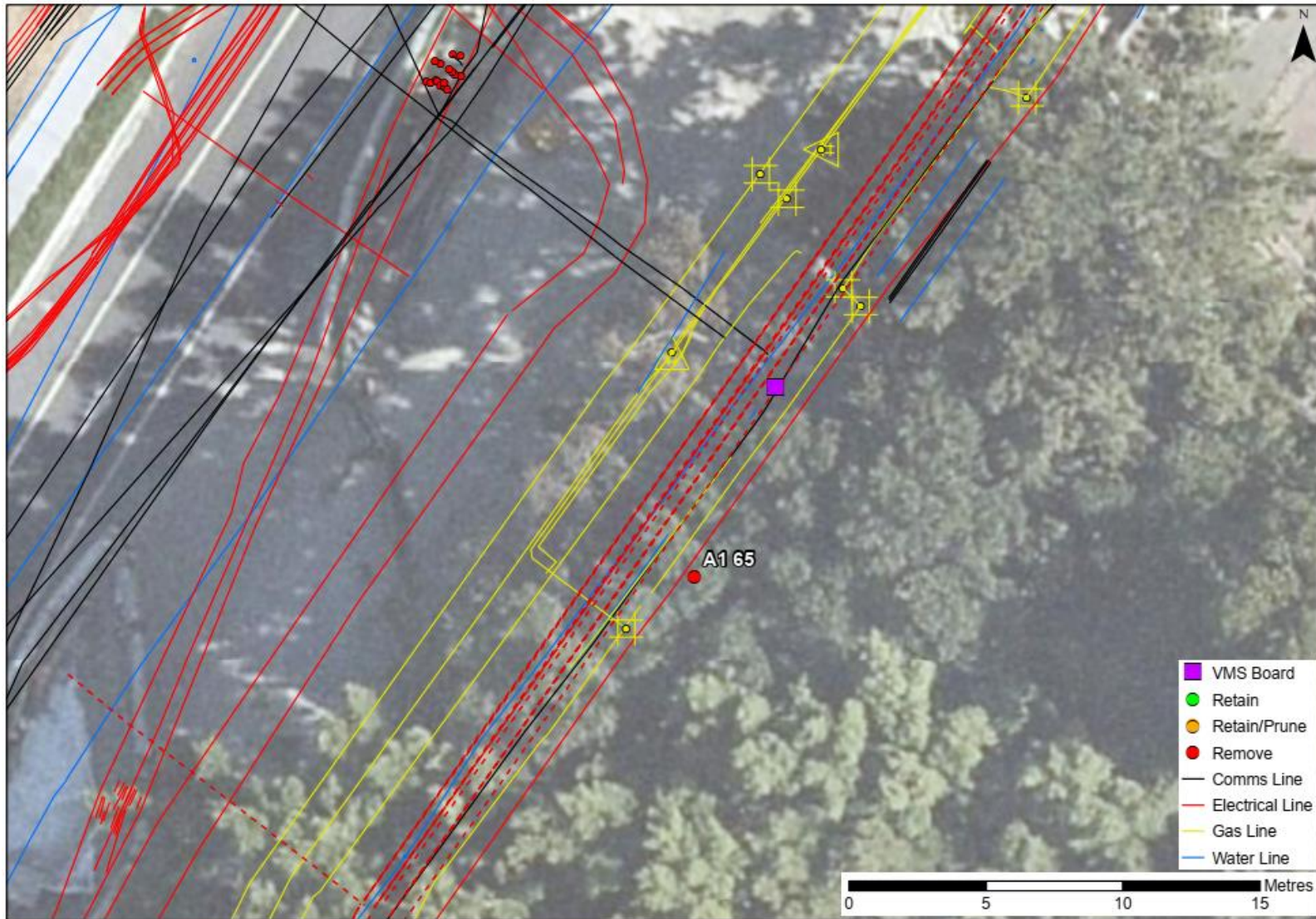
[www.westconnex.com.au](http://www.westconnex.com.au)

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Appendix E – Site Mark Up with CCTV and Over Height Locations



Appendix F – Tree Location Map



## Appendix G – Site Photographs



Plate 1 – Tree A1 65 -Arrow notes the co-dominant stem that overhangs the VMS (VMS footing can be noted as orange structure at base of tree).





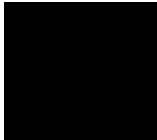
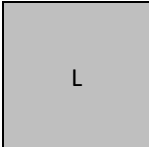
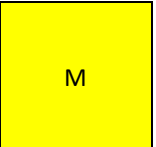
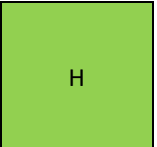
Plate 2 – Arrows note subject tree and VMS footing.



Appendix H – Schedule of Assessed Trees - Site inspection 114 Euston Rd, Alexandria - 14 March 2019

Tree No.	Genus & species Common Name	Ht (m)	Sp (m)	DBH (mm)	Age	V	C	Comments	ULE	TSR	RV	SRZ (m)	TPZ (m)	TPZ (area)
A1 65	<i>Eucalyptus sideroxylon</i> Mugga/Red Ironbark	16	10	500	M	G	G-F	Introduced native species. Co-dominant stem @ 5m AGL. Tree has had extensive crown raising on both stems. Co-dominant stems estimated as 300mm Ø & 325mm Ø.	2A	H	H	2.7	6.0	113

KEY

	Tree to be retained.		Not classed as 'a tree' under DPE conditions (see Part 1.3).		Tree proposed to be removed.
	Low Retention Value-These trees are not considered as important for retention.		Medium Retention Value-These trees may be retained & protected.		High Retention Value -These trees are considered important for retention and should be retained and protected.

\* DBH is visually estimated (usually adjoining trees or those that are hard to access). AB – above *buttress roots*. AGL - above ground level.

\*\* Determined by the largest number found (i.e. broadest branch spread or highest DBH) within a tree group to ensure ample tree protection zone.

**H** refers to the approximate height of a tree in metres, from base of stem to top of tree crown.

**Sp** refers to the approximate and average spread in metres of branches/canopy (the 'crown') of a tree.

**DBH** refers to the approximate diameter of tree stem at breast height i.e. 1.4 metres above ground (unless otherwise noted) and expressed in millimetres.

**Age** refer to Appendix A -Terms and Definitions for more detail.

**V** refers to the tree's vigour (health) Refer to Appendix A -Terms and Definitions for more detail.

**C** refers to the tree's structural condition. Refer to Appendix A -Terms and Definitions for more detail.

**ULE** refers to the estimated *Useful Life Expectancy* of a tree. Refer to Appendices A and B for details.

- TSR** The *Tree Significance Rating* considers the importance of the tree as a result of its prominence in the landscape and its amenity value, from the point of view of public benefit. Refer to Appendix C – Significance of a Tree Assessment Rating for more detail.
- RV** Refers to the retention value of a tree, based on the tree’s ULE *and* Tree Significance. Refer to Appendix C – Significance of a Tree Assessment Rating for more detail.
- SRZ** Structural Root Zone (SRZ) refers to the critical area required to maintain stability of the tree. Refer to Appendix A -Terms and Definitions for more detail.
- TPZ** Tree Protection Zone (TPZ) refers to the *tree protection zones* for trees to be retained. Refer to Appendix A -Terms and Definitions for more detail.

Appendix I – Excerpt of Tree Details from Original Tree Report

Excerpt of *Euston Road Tree Report* (Rev 8) no. *M5N-ES-RPT-LRW-0006-08*, authored by Australian Tree Consultants (ATS).

No	Botanical name	Retention value	Tree Location	Encroachment into TPZ		Cause of encroachment	Proposed outcome	Reason for proposed outcome
				Major	>10%			
A1 65	<i>Eucalyptus sideroxylon</i>	High	Adjacent to footprint	Major	>10%	Construction	Retain	To be retained through implementation of non-destructive construction and/or tree protection.

A1 65	<i>Eucalyptus sideroxylon</i>	16	10	500	6	2.5	Good	Good	151.188666, -33.909757	
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Planning Services  
Infrastructure Management

Contact:

Email:

Our Ref: SSI 6788

[Redacted]  
Director – Project Delivery  
New M5 WestConnex  
Roads and Maritime Services  
Locked Bag 928  
North Sydney NSW 2059

BY EMAIL ONLY: [Redacted]

Dear [Redacted]

**Approval of Tree Reports: Euston Road, Alexandria and Bourke Road, Mascot  
condition B63: WestConnex New M5 (SSI 6788)**

I refer to your submission requesting approval of two tree reports for SSI 6788, as follows:

- *Arboricultural Impact Assessment – Variable Message Sign (VMS) Installation 118 Euston Road, Alexandria* to remove one prescribed tree on Euston Road, Alexandria,
- *Arboricultural Impact Assessment – Conduit Installation 200 Bourke Road, Mascot* to remove one prescribed tree on Bourke Road, Mascot.

I note the following in relation to your request:

- Roads and Maritime Services advises that tree removal to accommodate the proposed work, including installation of a variable message sign board (Euston Road) and new conduits (Bourke Road), is consistent with the project approval,
- RMS considered alternatives to avoid the removal of the two subject trees,
- the tree reports contain the information required by the conditions of approval.

Consequently, as delegate of the Planning Secretary, I approve the two tree reports pursuant to condition B63. Please make this approval publicly available on the project website.

Please ensure tree removal is limited to the specified trees (A1 65 on Euston Road, Alexandria and T1 on Bourke Road, Mascot) and there is no damage to branch architecture of any other trees. Please ensure you seek land owner permission to access the trees where required, prior to commencing any work.

Please also ensure you implement the management and mitigation measures noted in the tree reports in accordance with condition B63. Please ensure replanting of trees is conducted in accordance with the requirements of condition B63A-B63C.

If you have any questions, please contact [Redacted] on the details listed above.

Yours sincerely

[Redacted] 10/5/2019

**Director, Infrastructure Management**  
As delegate of the Planning Secretary

Copied to: [Redacted]

Department of Planning & Environment

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