The Maltings Mittagong Arboricultural Impact Assessment

Halcyon Hotels Pty Ltd

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Template 2.8.1

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Abbreviations

Abbreviation	Description
AQF	Australian Qualifications Framework
AS	Australian Standards
DBH	Diameter at Breast Height
ELA	Eco Logical Australia
m	Metre
mm	Millimetre
NDE	Non-Destructive Excavation
NO	Number
NSW	New South Wales
SP	Species
SRZ	Structural Root Zone
TPZ	Tree Protection Zone
VTA	Visual Tree Assessment

1. Background

This Arboricultural Impact Assessment was prepared for Halcyon Hotels Pty Ltd in relation to the proposed redevelopment of the Maltings site at Mittagong. Halcyon Hotels Pty Ltd is proposing to refurbish existing buildings on site; construct new hotel accommodation, swimming pool, gymnasium, private residential development and associated infrastructure. The proposal includes vegetation management in accordance with the Vegetation Management Plan (ELA 2020) and Bushfire Assessment (Peterson Bushfire 2020).

The address of the subject site is in Table 1 and mapped in Figure 1. The purpose of this report is to:

- identify the trees within the site that are likely to be affected by the proposed works
- undertake a visual tree assessment of the subject trees
- assess the current overall health and condition of the subject trees
- evaluate the retention value of the subject trees
- identify trees to be removed, retained or transplanted
- determine the likely impacts on trees to be retained
- recommend tree protection measures to minimise adverse impacts

Features of the subject site are tabulated below.

Table 1: Development site

Criteria	Description
Street address	2 Colo Street, Mittagong
Lot and DP	Lot 21 DP 1029384
Local Government Area	Wingecarribee Shire Council
General land use	Commercial and recreational
Overview of vegetation (e.g. planted, remnant)	Native remnant trees, planted native and exotic trees and riparian vegetation
Endangered ecological community or species	Southern Highlands Shale Woodland
Heritage item	The Maltings is under consideration for NSW State Heritage Significance listing: 'The gardens and trees of The Maltings site are attractive landscaped features, and tacitly mirror the imported aspects of The Maltings' landscape history. The site is an excellent example of an intact rural industrial complex, in which the park-like setting can be seen to complement and enhance the industrial architecture.' (https://www.environment.nsw.gov.au/heritageapp/ViewHeritageItemDetails.aspx?ID=5056030)

The description of the proposed activity in Table 2 below is based on information available at the time of preparing this report.

Table 2: Proposed activity

Activities that can impact trees	Description of proposed activities
Clearing vegetation	Yes – for new infrastructure and weed control New buildings – M2 Shed, M4, Malster's House Flexible Space, future Maltings 5-6 New roads - M3 and M4 service entry road from Southey Street, entry road to M1,2,3,4 from Colo Street New carparking – M2 Visitor Carparking, M3 and M4 Visitor Carparking New vehicle bridge It is understood that no trees need to be removed for the reuse of buildings M1, M2, M2 Pavilion, M3, the footprint of the Malster's House, or the service entry to M1 &2 from Ferguson Crescent. It is proposed to remove any trees in the vicinity of the Malster's House that are not deemed valuable or significant.
Pruning vegetation	Yes
Earthworks including regrading, excavation and trenching • For building • For services • Access roads and paths	The main excavation proposed is for vehicle entry to and out of the M4 car park and for the car park itself New buildings – earthworks for M2 Shed, Malster's House Flexible Space and future Maltings 5-6 New carparks – Visitor carparking M4 New roads - M3 and M4 service entry road from Southey Street, new road section from the vehicle bridge to M4 New vehicle bridge footings Services It is understood that no trees need to be removed as there is no excavation for the pedestrian path from the pedestrian bridge to M3, no excavation for the pedestrian path through the Southern Highlands Shale Woodland, no excavation for the entry road to M1,2,3,4 from Colo Street and no excavation for the M2 Visitor Carparking.
Compaction • Storage of materials • Installation of structures • Stockpiling fill or materials • Parking	Yes entry road to M1,2,3,4 from Colo Street and Visitor Carpark M2
Refuelling and chemical use (e.g. herbicides)	Yes
Erection of scaffolding	Yes
Vehicle movements	Yes
Changes to stormwater management	Yes – the stormwater management plan is still being designed and will avoid impacts to trees.
Bushfire Asset Protection Zone (APZ)	No trees will be removed to establish the Asset Protection Zone (APZ)

Figure 1: Location of development site

2. Method

2.1 Definition of a tree

A tree is defined under the Australian Standard, AS 4970-2009, Protection of Trees on Development Sites as a long lived woody perennial plant greater than (or usually greater than) 3 m in height with one or relatively few main stems or trunks.

The Wingecarribee Shire Council defines a tree as:

'a perennial plant with at least one self supporting stem which; has a height of more than 6 m and; has an outside circumference of at least 500 mm at a height of 1 m above the ground or; has an outside circumference of at least 500 mm at ground level where the tree has been cut down or removed; or has a branch and foliage crown spread of at least 4m' (Wingecarribee Shire Council 2019).

2.2 Visual tree assessment

The subject trees were assessed in accordance with a stage one visual tree assessment (VTA) as formulated by Mattheck and Breloer (1994) and practices consistent with modern arboriculture.

A total of **533 subject trees** were inspected on the 15th, 16th and 17th of April by AQF Level 5 Consulting Arborist, Jessica Lawn.

The following limitations apply to this methodology:

- Trees were inspected from ground level, without the use of any invasive or diagnostic tools and testing.
- Trees were inspected within limits of site access.
- No aerial inspections or root mapping was undertaken.
- Tree heights, canopy spread and diameter at breast height (DBH) were estimated, unless otherwise stated.
- Tree identification was based on broad taxonomical features present and visible from ground level at the time of inspection.
- Trees were tagged with silver tags where available.
- Tree locations are based on a 2019 survey by Veris Australia Pty Ltd.

2.3 Retention value

The retention value or importance of a tree or group of trees, is determined in accordance with the Institute of Australian Consulting Arborists (IACA) Significance of a Tree Assessment Rating System (STARS©), which is summarised in Appendix A. The method considers the Useful Life Expectancy (ULE) and landscape significance of a tree. Trees are provided one of the following ratings:

- **High - priority for retention:** These trees are considered important and should be retained and protected. Design modification or re-location of building/s should be considered to accommodate the setbacks as prescribed by Australian Standard AS 4970–2009 Protection of trees on development sites.

- **Medium - consider for retention:** These trees are moderately important for retention. Their removal should only be considered if adversely affected by the proposed works and all other alternatives have been considered and exhausted.
- **Low - consider for removal:** These trees are not considered important for retention, nor require special works or design modification to be implemented for their retention.
- **Priority for removal:** These trees are considered hazardous, or in irreversible decline, or weeds and should be removed irrespective of development.

2.4 Protection zones

2.4.1 Tree protection zone (TPZ)

The TPZ is a specific area above and below ground and at a distance from the trunk set aside for the protection of a tree's roots and crown to provide for the viability and stability of a tree to be retained where it is potentially subject to damage by the development. The TPZ (as defined by AS 4970-2009) requires restriction of access during the development process. Groups of trees with overlapping TPZs may be included within a single protection area. Tree sensitive measures must be implemented if works are to proceed within the TPZ.

2.4.2 Structural root zone (SRZ)

The SRZ is the area of the root system (as defined by AS 4970-2009) used for stability, mechanical support and anchorage of the tree. It is critical for the support and stability of trees. Severance of roots within the SRZ is not recommended as it may lead to the destabilisation and/or decline of the tree.

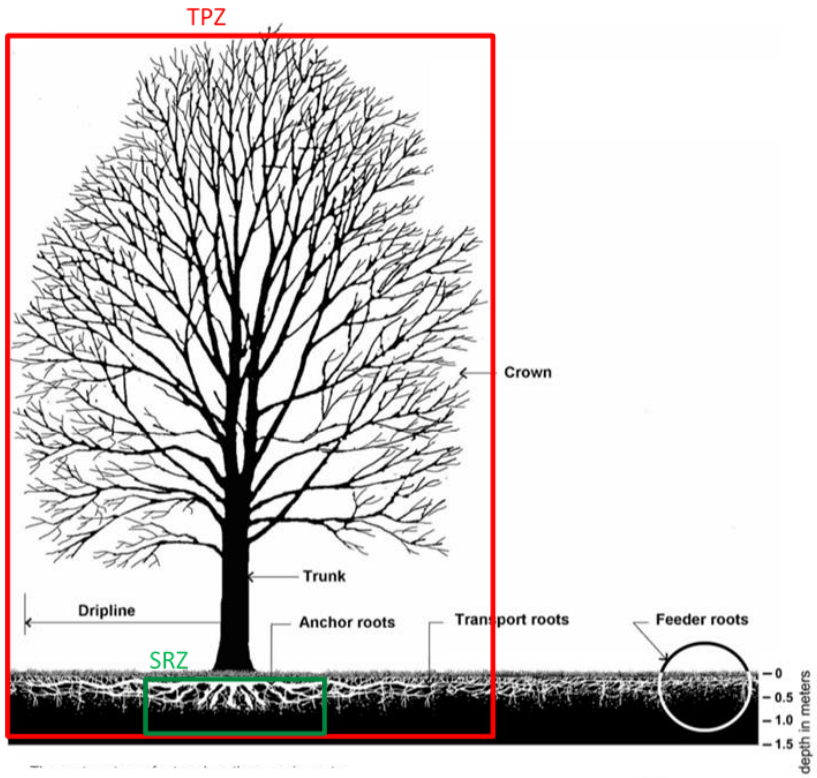

Figure 2: Representative tree structure and indicative TPZ and SRZ

2.5 Potential impacts

Trees may be impacted by physical or chemical damage to roots or above tree parts. Examples include impacts associated with site grading, soil compaction, excavation, stock piling within TPZ as well as changes in site hydrology, changes in soil level and site contamination. The extent of encroachment to the TPZ and SRZ determines the level of potential impact.

The AS 4970-2009 defines types of encroachment as follows and as illustrated in Appendix B:

- **Major encroachment** - If the proposed encroachment is greater than 10% of the TPZ or inside the SRZ, the project arborist must demonstrate that the tree(s) would remain viable. The location and distribution of roots may be determined through non-destructive excavation (NDE) methods such as hydro-vacuum excavation (sucker truck), Air Spade or manual extraction. The area lost to this encroachment should be compensated for elsewhere and contiguous with the TPZ.
- **Minor encroachment** – If the proposed encroachment is less than 10% of the TPZ, and outside of the SRZ, detailed root investigations should not be required. The area lost to this encroachment should be compensated for elsewhere and contiguous with the TPZ.

Impacts are calculated using geographic information systems techniques.

For the purposes of this Arboricultural Impact Assessment, impacts are defined as follows and take into account the type of proposed impact as well as extent of encroachment. For example, trees on the edges of gravel roads and the carpark would have a reduced expected impact because water can continue to infiltrate the TPZ/SRZ and no excavation is proposed.

- **High impact:** The SRZ is directly affected or the proposed encroachment is greater than 20% of the TPZ. Trees may not remain viable if they are subject to high impact. These trees cannot be retained unless the proposal is changed. Selected trees on the edges of gravel roads and carparks are excluded from this category.
- **Medium impact:** If the proposed encroachment is greater than 10% of the TPZ (but less than 20% of the TPZ) and outside of the SRZ, the project arborist may require detailed root investigation to demonstrate that the tree(s) would remain viable. These trees may be retained subject to further investigation and mitigation measures. Selected trees on the edges of gravel roads and carparks are excluded from this category.
- **Low impact:** If the proposed encroachment is less than 10% (total area) of the TPZ, and outside of the SRZ, detailed root investigations should not be required. These trees can be retained. Selected trees along the edge of gravel roads and carparks are included in this category.
- **No impact:** No likely or foreseeable encroachment within the TPZ. These trees can be retained.

Willows will be removed and are shown as a separate category of impact.

3. Results and discussion

3.1 Calculated encroachments

Results of the calculated major and minor encroachments from the development footprint are summarised in Table 3 and include Willows to be removed for weed control. Detailed results are in Appendices C and D. The site plan is in Appendix F.

Table 3: Summary of calculated major and minor encroachment

Retention value	Major encroachment	Minor encroachment	No encroachment	Total
Priority for retention (High)	76	42	183	301
Consider for retention (Medium)	26	3	113	142
Consider for removal (Low)	3	-	28	31
Sub-total	105	45	324	474
Priority for removal WoNS (Willows to be removed)	-	-	-	59
Total	**105**	**45**	**342**	**533**

Trees within the site are dominated by exotic species, including Salix species (Willows), *Pinus radiata* (Monterey Pine), *Cupressus macrocarpa* (Monterey Cypress) and *Cupressocyparis leylandii* (Leyland Cypress). Salix species are categorised as environmental weeds by Wingecarribee Council (wsc.nsw.gov.au 2020) and are recognised by the Australian Government as a Weed of National Significance (WoNS). Salix species will need to be removed due to their status as a WoNS. Removal of these trees needs to be undertaken carefully to avoid compromising the stability of the Nattai River banks within The Maltings site. Replacement planting with suitable species and erosion controls will be required.

Wingecarribee Council also lists *Pinus radiata* as an environmental weed. Native species on site include Acacia and Eucalyptus species.

3.2 Proposed impacts

Further analysis was done to take into account the type of proposed impact, particularly as it relates to the gravel road and carpark, as well as extent of encroachment. The revised impact assessment maps are presented in Appendix C and summarised in Table 4. As the gravel road/car park will not be excavated and will continue to allow infiltration of rain into the root zone, the following actions are recommended on the nearby trees:

- Trees 76H to 78G – Long ULE, High retention & significance – Retain
- Trees 80F to 83E – Long ULE, High retention & significance – Retain
- Trees 84B to 85H – Long ULE, High retention & significance – Retain
- Tree 86 – Low retention value - Remove and offset
- Tree 90 – Short ULE, medium retention value - Remove and offset
- Tree 91 - Low retention value - Remove and offset

- Tree 92 - Low retention value - Remove and offset
- Tree 93 - High significance - Retain
- Tree 94 - High significance - Retain
- Tree 95 - Poor health (damaged) - Remove and offset
- Trees 98, 106, 108, 111, 113, 115, 124, 151, 154, 160, 161, 163 – Retain by placing gravel outside the trees' SRZs and mulching within the SRZs.

Trees 93 and 94 are positioned at the entrance of the proposed gravel carpark. These two mature trees have a large DBH, a long-life expectancy and are of good health. As there will be no excavation or root disturbance, the traffic should be directed to minimise impacts within the TPZs of these two trees. Due to their high significance in the landscape and with some remedial pruning (i.e. lifting to accommodate traffic) and mulching within the SRZ, they would be a feature if retained.

Trees 86, 90 and 91 have fair to low health, and a short ULE due to being short-lived Acacias. Removal of these trees and planting/offsetting (elsewhere within the carpark) with *Eucalyptus* or *Callitris* spp., would provide permanence for the future of the site including amenity, habitat etc.

A proposed bitumen road and new building would encroach >20% of the TPZ of Tree 298 (i.e. major encroachment). However, retention of Tree 298 is a priority due to its high significance in the landscape. Further consideration of the proposed design and construction methods within the TPZ of Tree 298 should be undertaken in consultation with the project arborist to ensure retention is viable. The project arborist should be on site during construction to supervise and provide further advice as needed.

Table 4: Summary of proposed impact

Retention value	High impact	Medium impact	Low impact	No impact	Total
Priority for retention (High)	20	7	91	183	301
Consider for retention (Medium)	23	-	6	113	142
Consider for removal (Low)	3	-	-	28	31
Sub-total	46	7	97	324	474
WoNS (Willows to be removed)	-	-	-	-	59
Total	**46**	**7**	**97**	**324**	**533**

Any additional impact outside the footprint as shown, including construction stockpiles and stormwater management, needs to be assessed and approved prior to on-ground work.

Any loss of trees should be offset with replacement planting in accordance with the relevant offset policy.

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4. Tree protection plan

- All tree pruning and removal is to be carried out by an arborist with a minimum AQF Level 3 qualification in Arboriculture.
- All tree work must be in accordance with Australian Standard AS 4373-2007, Pruning of Amenity Trees and the NSW WorkCover Code of Practice for the Amenity Tree Industry (1998).
- Permission must be granted from the relevant consent authority prior to removing or pruning of any of the subject trees. Approved tree works should not be carried out before the installation of tree protection measures.
- Any additional construction activities within the TPZ of the subject trees must be assessed and approved by the project arborist and must comply with AS 4970-2009 - Protection of trees on development sites.

Tree protection measures are summarised in Table 5 and further information is in Appendix E.

Table 5: Protection measures

Type	More details	Comment
Signage	Appendix E1	Prominently sign posted with 300 mm x 450 mm boards stating, “NO ACCESS - TREE PROTECTION ZONE”.
Tree protection fencing	Appendix E1	Protective cyclone chain wire link fence to be erected around the TPZ to protect and isolate retained trees from the construction works. Existing boundary fencing may be used.
Crown protection	Appendix E2	Where required, crown protection may include the installation of a physical barrier, pruning selected branches to establish clearance, or the tying/bracing of branches.
Trunk and branch protection	Appendix E3	When fencing is not practical or prior to any activities within the TPZ, trunk protection is required and consist of a layer geotextile fabric or similar followed by 1.8 m lengths of softwood timbers spaced evenly around the trunk and secured with a galvanised hoop strap.
Ground protection	Appendix E4	Install and maintain 100mm thick layer of mulch around tree in TPZ. For machine or vehicle access within TPZ geotextile fabric beneath crushed rock or rumble boards may be required.
Soil moisture		Soil moisture levels should be regularly monitored by the project arborist. Temporary irrigation or watering may be required within TPZ.
Root protection and investigation	Appendix E5	If incursions/excavation within the TPZ are unavoidable, root investigation may be needed to determine the extent and location of roots within the area of construction activity using non-destructive excavation (NDE) methods.
Underground services	Appendix E6	All underground services should be routed outside of the TPZ. If underground services need to be installed within the TPZ, they should be installed using horizontal directional drilling (HDD), non-destructive excavation (NDE) methods such as hydro-vacuum, Air Spade or manually excavated trenches.

5. Hold points, inspection and certification

An AQF Level 5 Consulting Arborist needs to be engaged to supervise work within the TPZ, provide advice regarding tree protection and monitor compliance. Once each stage is reached, the work will be inspected and certified by the project arborist and the next stage may commence. Alterations to this schedule may be required due to necessity, however, this shall be through consultation with the project arborist only.

A copy of this report must be available on-site prior to the commencement of works, and throughout the entirety of the project. Hold points have been specified in the schedule of works below to ensure trees are adequately protected during construction. It is the responsibility of the principal contractor to complete each of the tasks.

Pre-construction

Indicate clearly (with spray paint on trunks) trees marked for removal.

During construction

Monthly inspection of trees by the project arborist (or other timing as agreed with the project arborist). Notification to be given prior to the commencement of work within the TPZ, with supervision by the project arborist of any work undertaken in this zone.

Post-construction

Final inspection of trees by project arborist after all major construction has ceased and following the removal of tree protection measures.

6. References

6.1 General references

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6.2 Project specific references

Snohetta 2020. *The Maltings Preliminary Site Plan* SD-A003 06.04.2020

Wingecarribee Shire Council (2019). *Part A Provisions Applicable to All Land.* Mittagong Township Development Control Plan – Effective 23 October 2019 pg. 53

Wsc.nsw.gov.au 2020. *Environmental Weeds In The Southern Highlands*. [online] Available at: <https://www.wsc.nsw.gov.au/uploads/786/enviro-weeds-web-small.pdf>

Appendix A Tree retention assessment method

A1 Tree Significance Assessment Criteria - STARS©

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

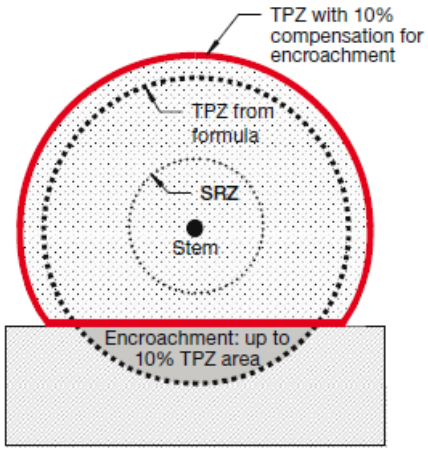
Low	Medium	High
The tree is in fair-poor condition and good or low vigour.	The tree is in fair to good condition and good or low vigour	The tree is in good condition and good vigour
The tree has form atypical of the species	The tree has form typical or atypical of the species	The tree has a form typical for the species
The tree is not visible or is partly visible from the surrounding properties or obstructed by other vegetation or buildings	The tree is a planted locally indigenous or a common species with its taxa commonly planted in the local area	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 provides a minor contribution or has a negative impact on the visual character and amenity of 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 is listed as a heritage item, threatened species or part of an endangered ecological community or listed on Council's significant tree register
The tree is a young specimen which may or may not have reached dimensions to be protected by local Tree Preservation Orders or similar protection mechanisms and can easily be replaced with a suitable specimen	The tree provides a fair contribution to the visual character and amenity of the local area	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'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's growth is moderately restricted by above or below ground influences, reducing its ability to reach dimensions typical for the taxa in situ	The tree supports social and cultural sentiments or spiritual associations, reflected by the broader population or community group or has commemorative values.
The tree is listed as exempt under the provisions of the local Council Tree Preservation Order or similar protection mechanisms		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.
The tree has a wound or defect that has the potential to become structurally unsound.		
Environmental Pest / Noxious Weed 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.		

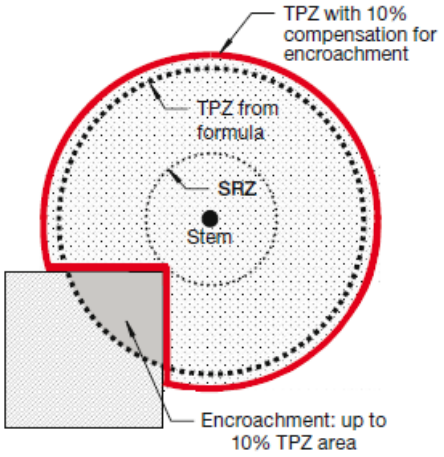
A2 Matrix assessment - STARS©

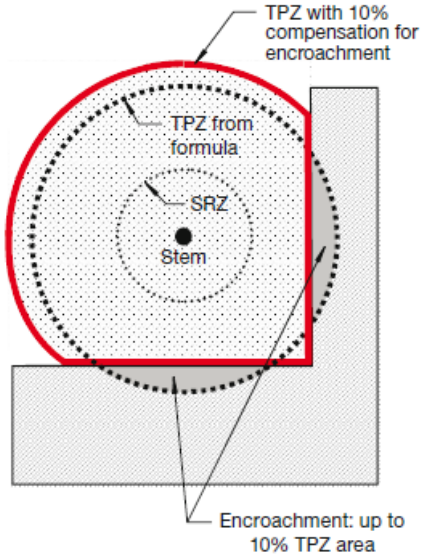
		High	Medium	Low		
		Significance in Landscape	Significance in Landscape	Significance in Landscape	Environmental Pest/Noxious Weed Species	Hazardous/ Irreversible Decline
Useful Life Expectancy	Long >40 years					
	Medium 15-40 years					
	Short <1-15 years					
	Dead					

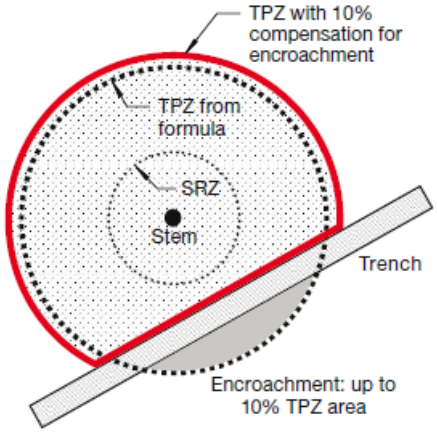
	Priority for retention (High): Tree considered important so should be retained and protected. Design modification or re-location of structure should be considered to accommodate the setbacks as prescribed by the *Australian Standard AS4970 Protection of trees on development sites*. Tree sensitive construction measures must be implemented if works are to proceed within the Tree Protection Zone.
	Consider for retention (Medium): Tree considered less important, however, retention should remain priority. Removal considered only if adversely affecting the proposed building/works and all other alternatives have been considered and exhausted.
	Consider for removal (Low): Tree not considered important for retention, nor requiring special works or design modification to be implemented for their retention.
	Priority for removal: These trees are considered hazardous, or in irreversible decline, or weeds and should be removed irrespective of development.

Appendix B Encroachment into tree protection zones - AS 4970-2009









Appendix C Maps

Figure 3:Tree locations, page 1

Figure 4: Tree locations, page 2

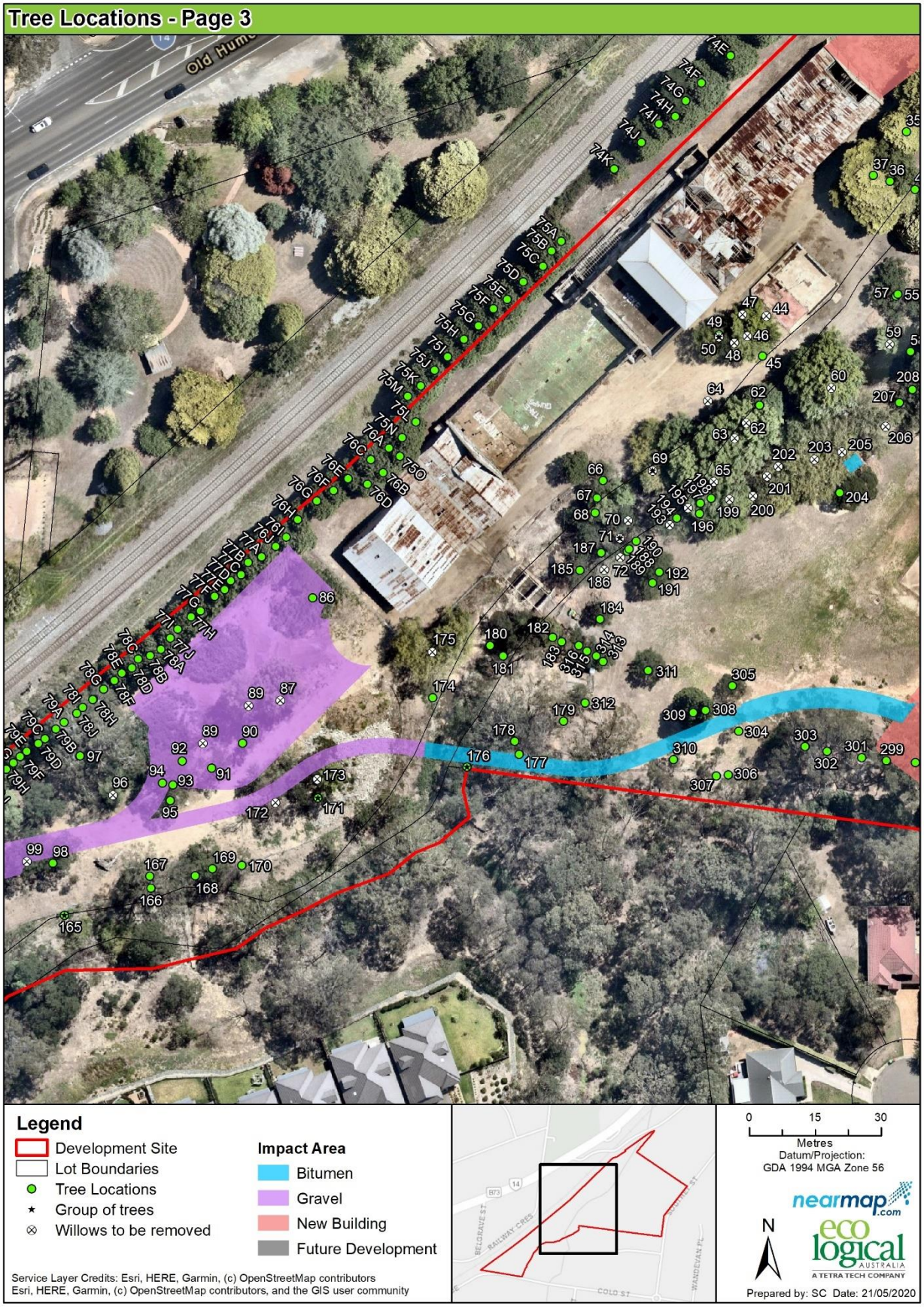


Figure 5: Tree locations, page 3

Figure 6: Tree locations, page 4

Figure 7: Retention values of subject trees, page 1

Figure 8: Retention values of subject trees, page 2

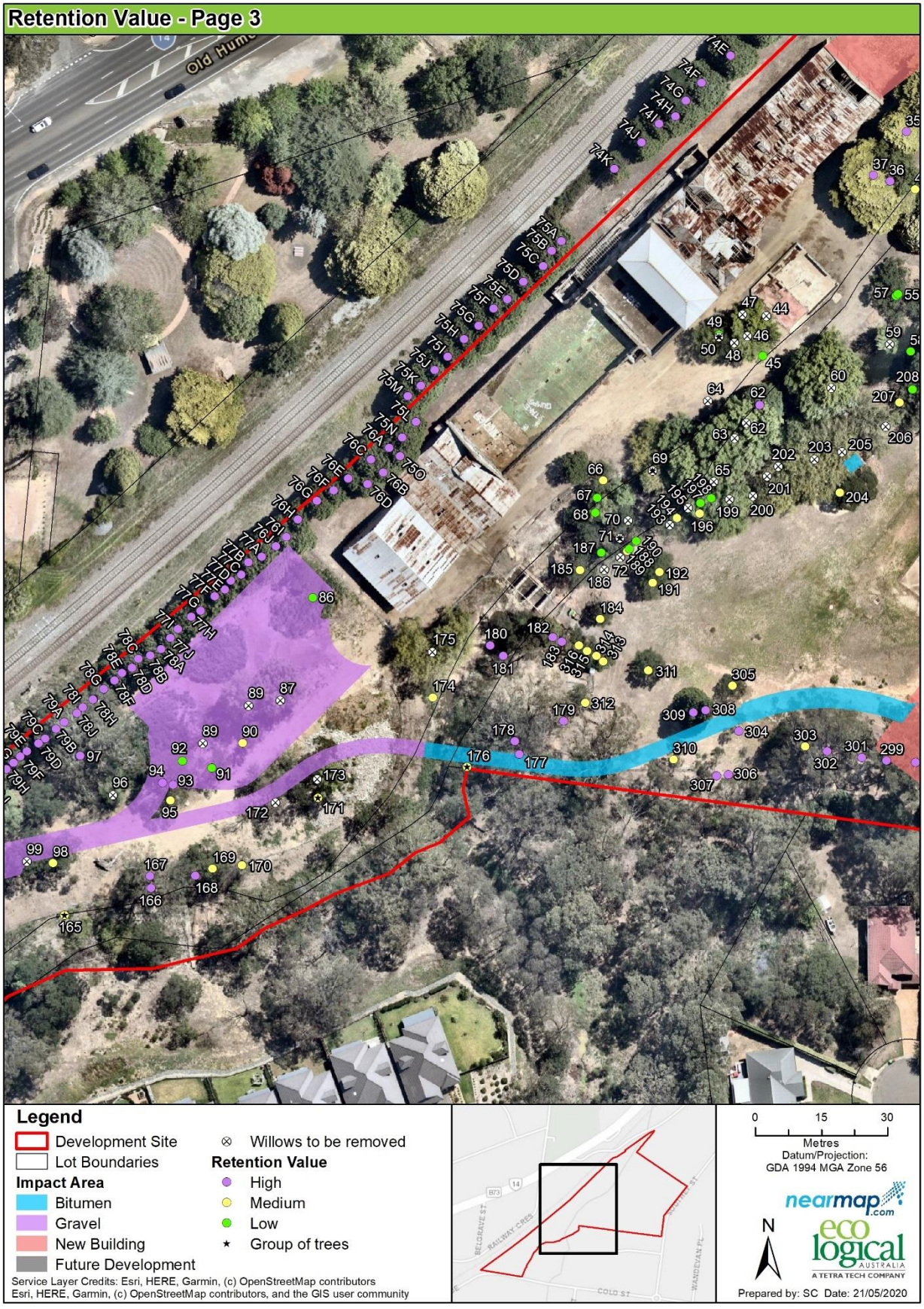


Figure 9: Retention values of subject trees, page 3

Figure 10: Retention values of subject trees, page 4

Figure 11: Calculated encroachment, page 1

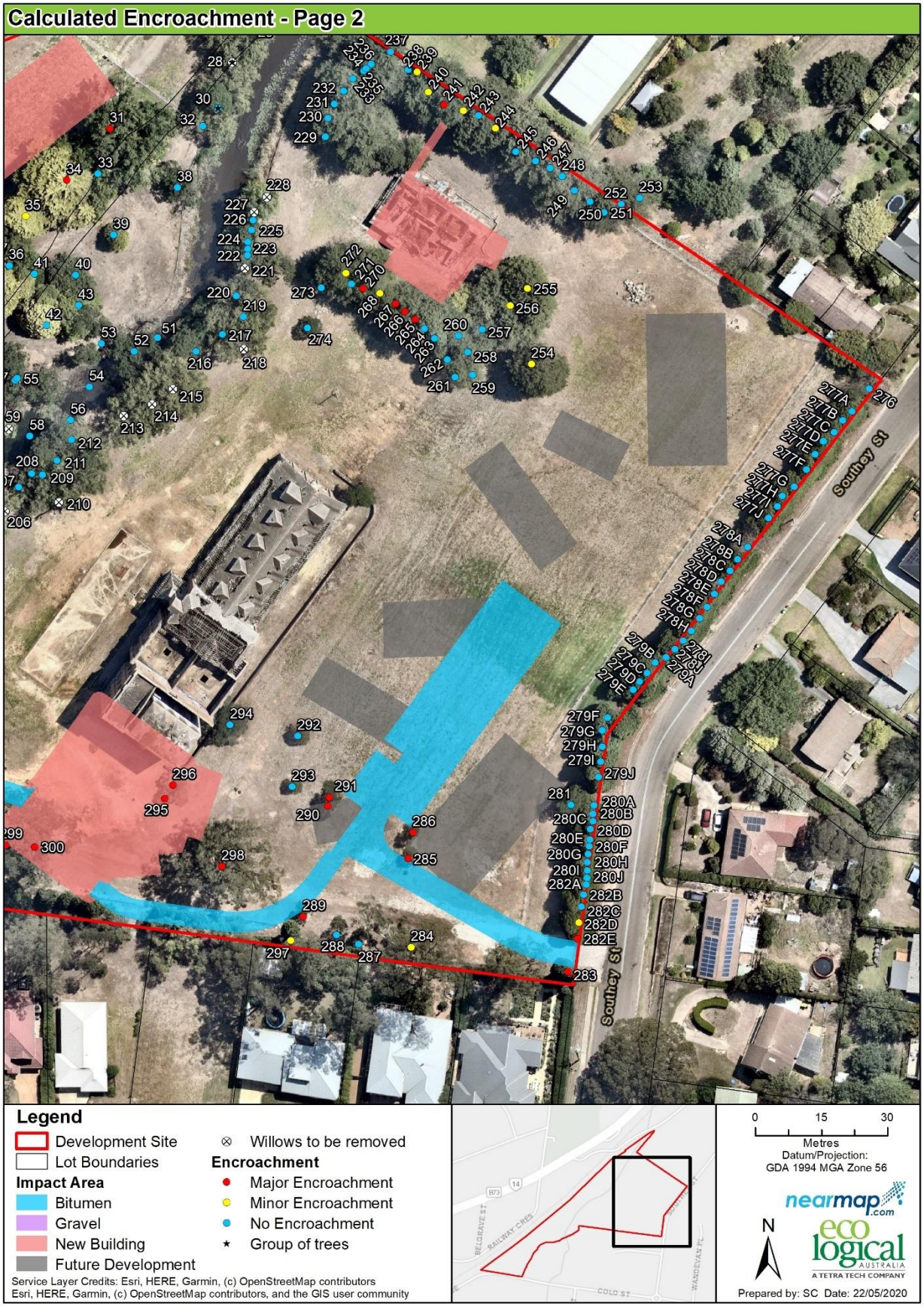


Figure 12: Calculated encroachment, page 2

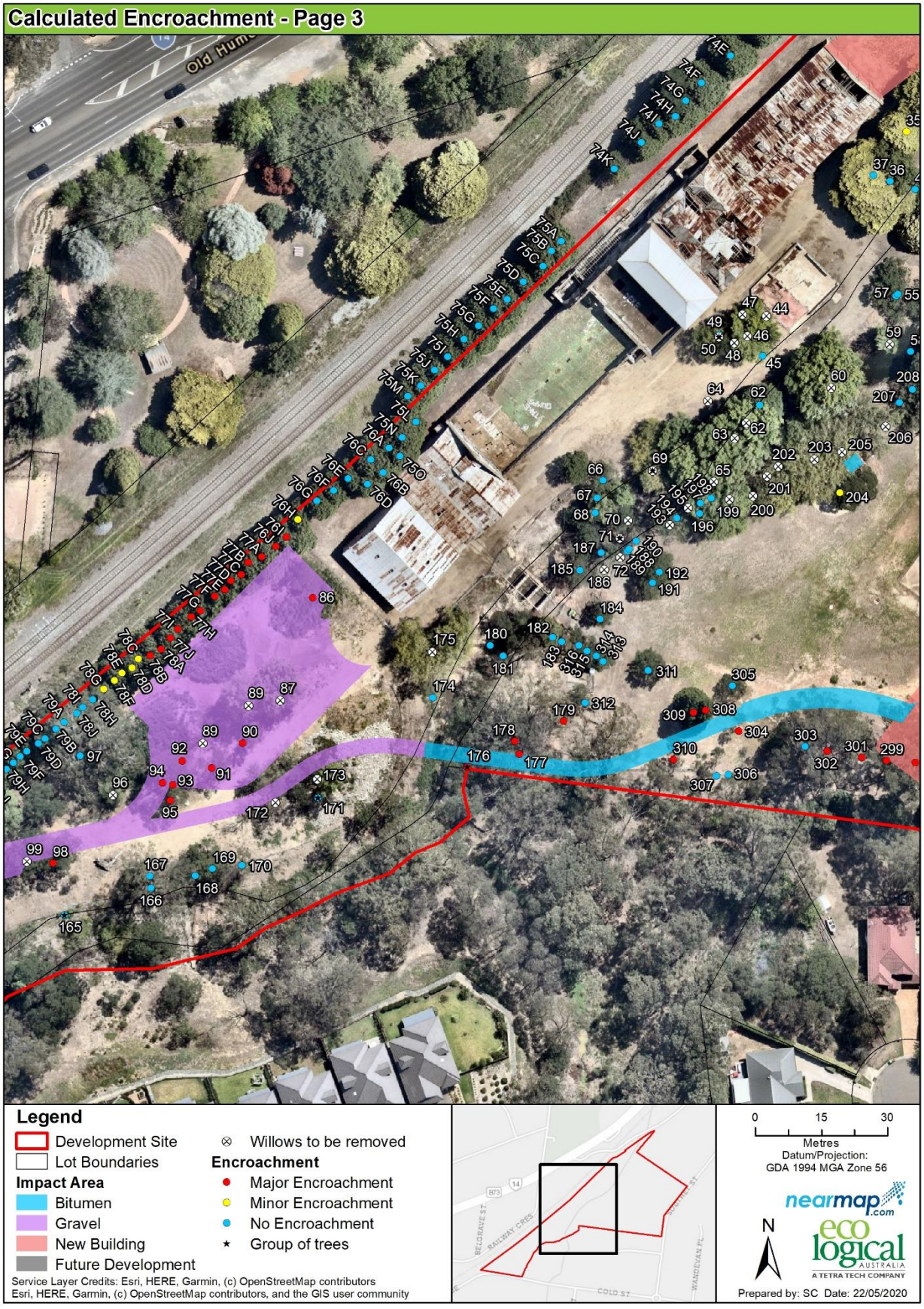


Figure 13: Calculated encroachment, page 3

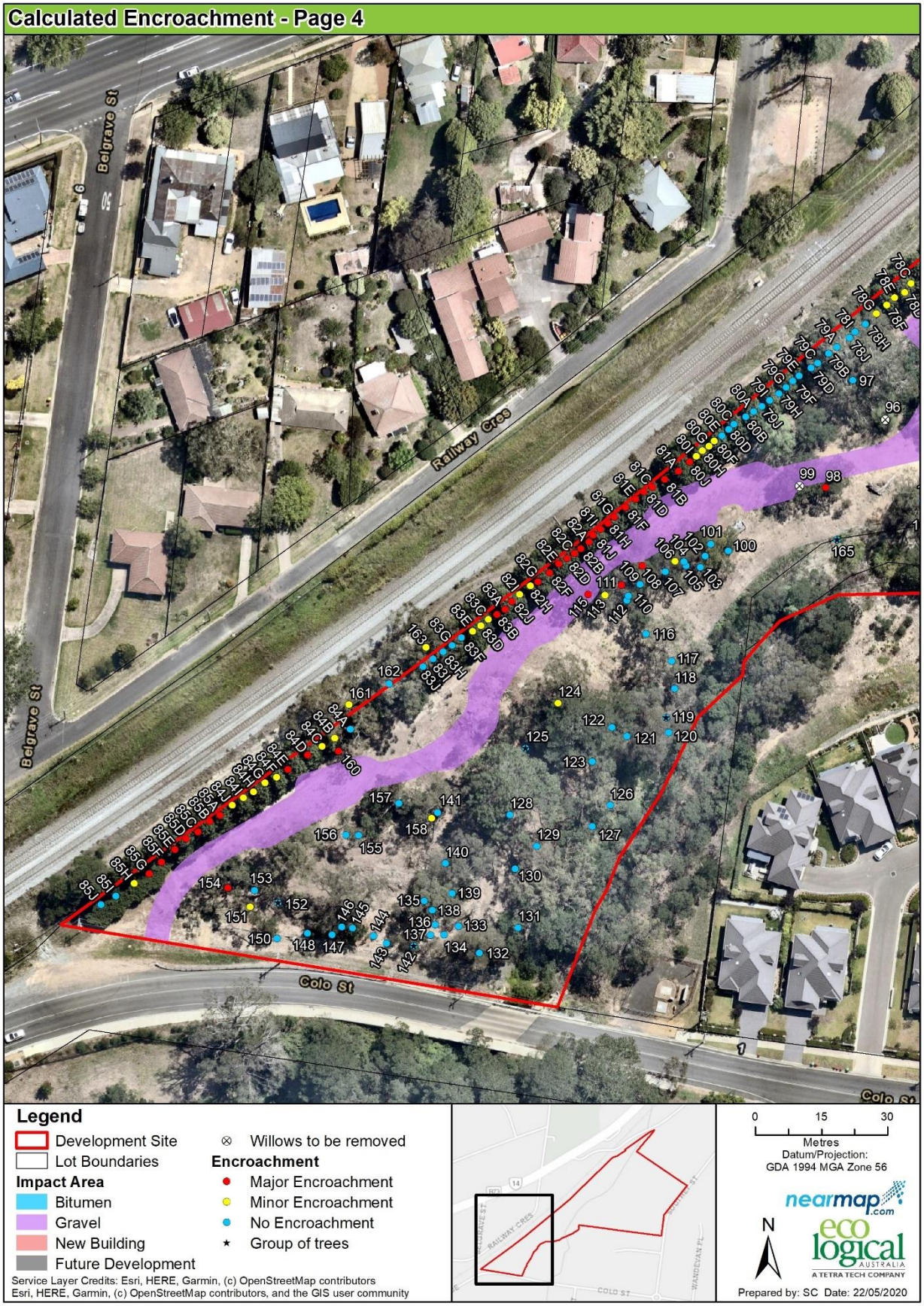


Figure 14: Calculated encroachment, page 4

Figure 15: Proposed impact, page 1

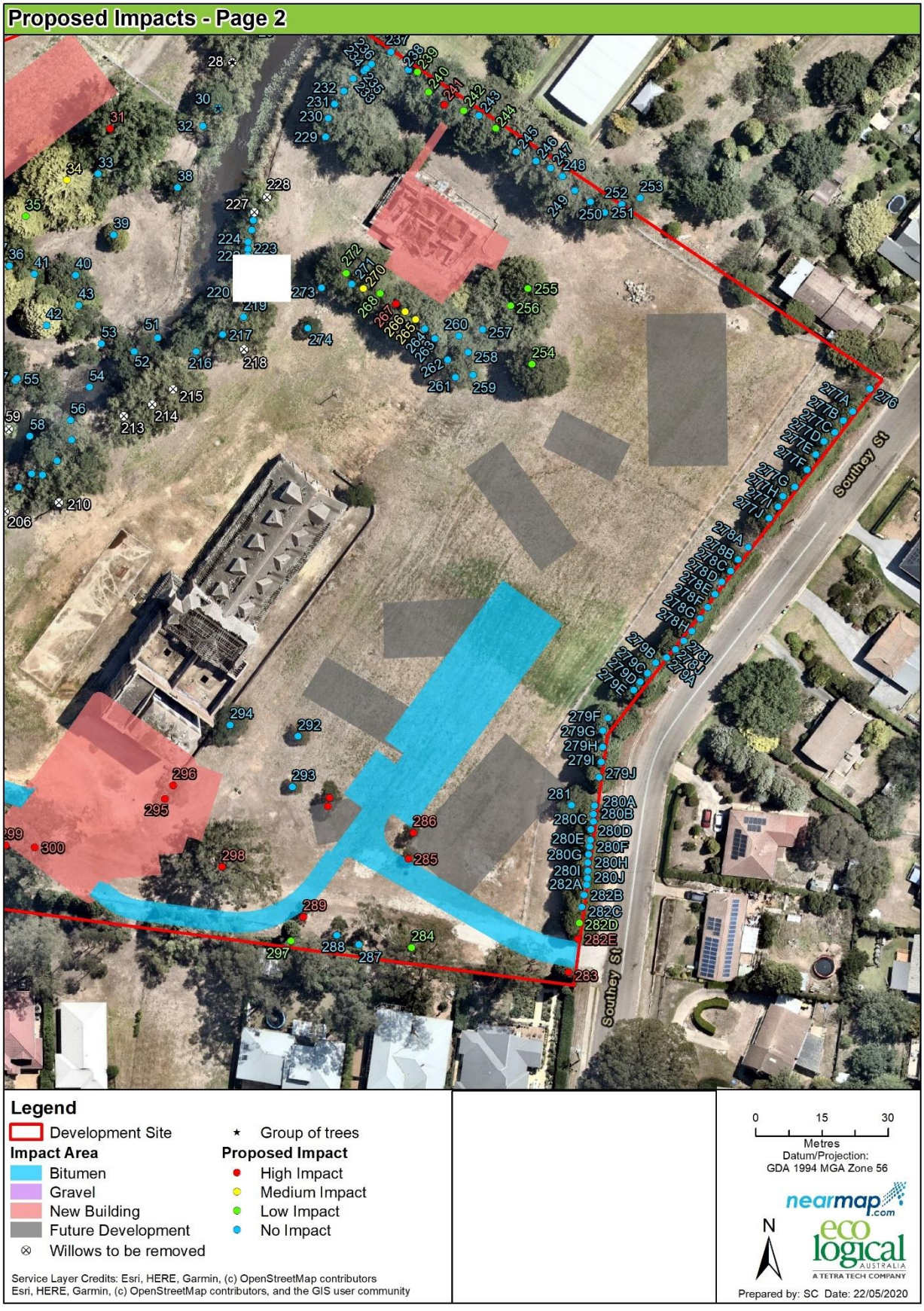


Figure 16: Proposed impact, page 2

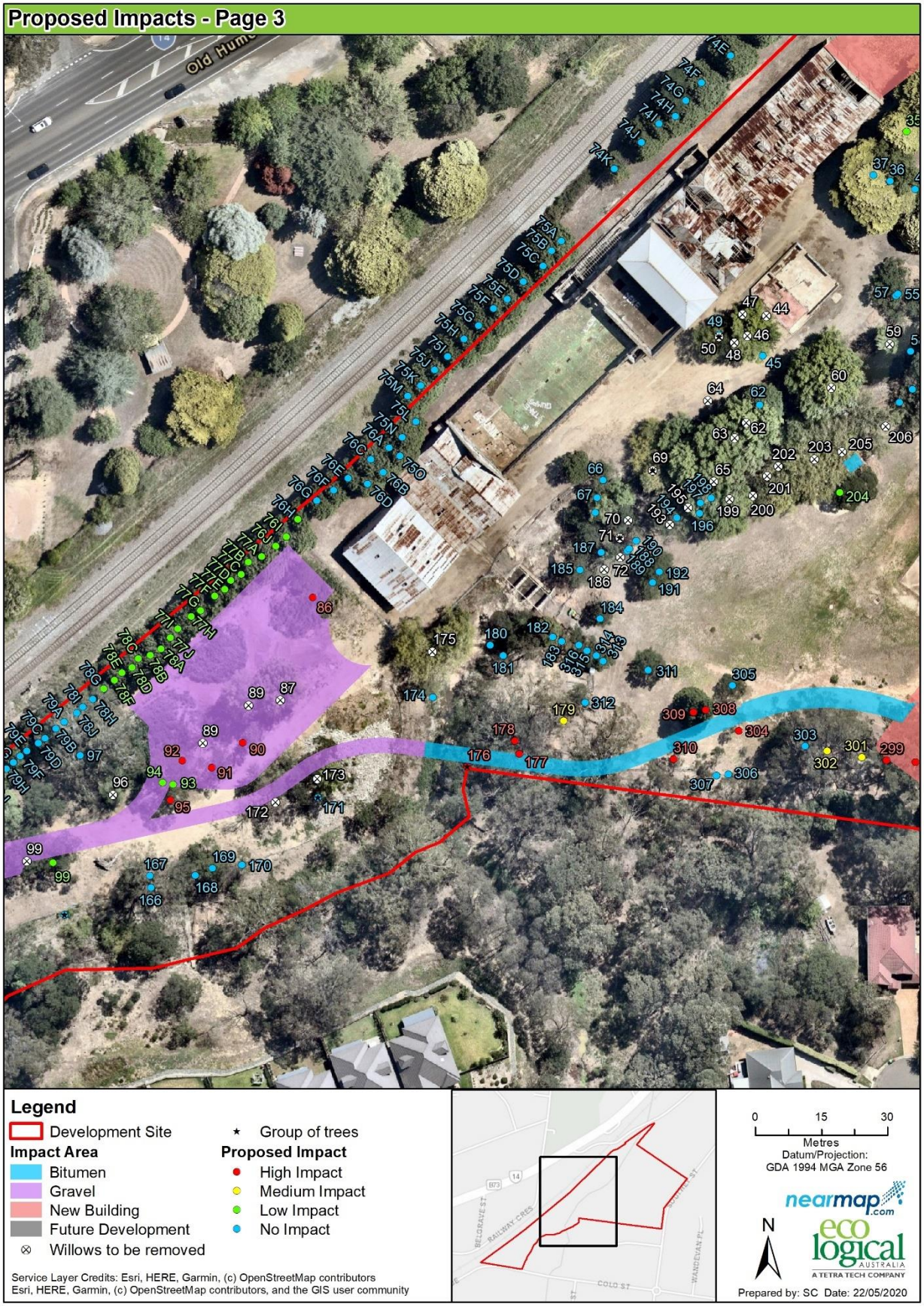


Figure 17: Proposed impacts, page 3

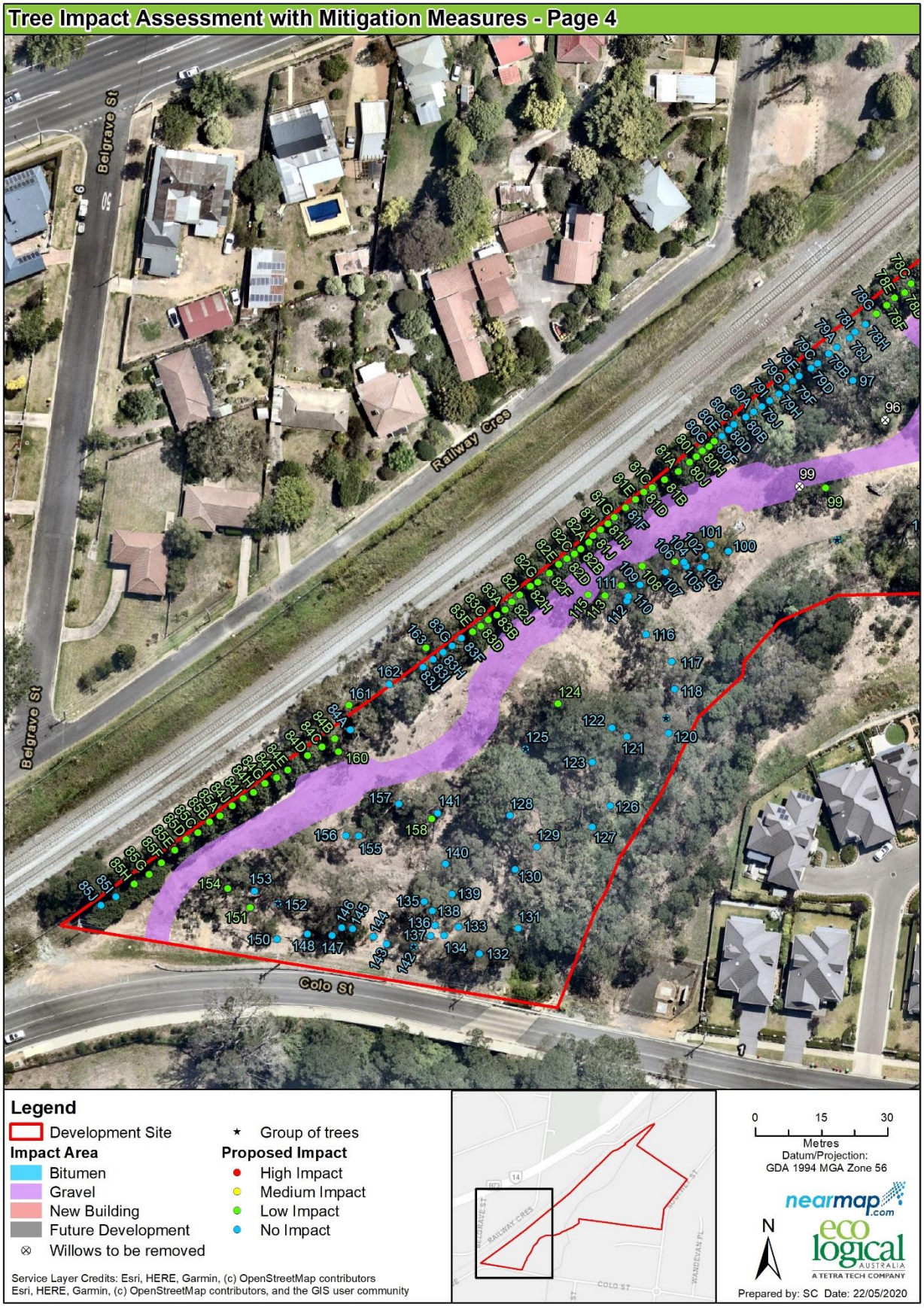


Figure 18: Proposed impacts, page 4

Appendix D Tabulated results of arboricultural assessment

Tree	Trees in group	Botanical name	Height (m)	Spread (m)	DBH (mm)	Health	Structure	Landscape significance	TPZ (m)	SRZ (m)	ULE	Retention value	TPZ Encroachment (%)	SRZ Impact	Calculated Impact	Proposed Impact	Notes on proposed impact	Notes on tree health
1	1	*Acacia decurrens*	10	5	250	Poor	Poor	Medium	3.0	1.9	Short (5-15 years)	Medium	0%	No	No Impact	No Impact		ivy up stem
2	1	*Acacia decurrens*	10	6	150	Poor	Poor	Medium	2.0	1.5	Short (5-15 years)	Medium	0%	No	No Impact	No Impact		ivy up trunk
3	1	*Acacia decurrens*	11	4	150	Poor	Fair	Medium	2.0	1.5	Short (5-15 years)	Medium	0%	No	No Impact	No Impact		Leaning
4	1	*Acacia decurrens*	12	6	250	Fair	Fair	Medium	3.0	1.9	Short (5-15 years)	Medium	0%	No	No Impact	No Impact		Leaning
5	1	*Pinus radiata*	24	15	1500	Good	Fair	Medium	15.0	3.9	Medium (15-40 years)	Medium	0%	No	No Impact	No Impact		Significant deadwood
6	1	*Acacia decurrens*	8	5	150	Poor	Poor	Low	2.0	1.5	Remove (<5 years)	Low	0%	No	No Impact	No Impact		Leaning over road. Decay at branch junctions
7	1	*Acacia decurrens*	14	9	200	Fair	Fair	Medium	2.4	1.7	Short (5-15 years)	Medium	0%	No	No Impact	No Impact		Multi trunked
8	1	*Acacia decurrens*	8	4	200	Fair	Poor	Medium	2.4	1.7	Short (5-15 years)	Medium	0%	No	No Impact	No Impact		
9	1	*Acacia decurrens*	12	2	100	Fair	Fair	Medium	2.0	1.5	Short (5-15 years)	Medium	0%	No	No Impact	No Impact		
10	1	*Cupressus sp.*	8	5	150	Good	Good	Medium	2.0	1.5	Long (>40 years)	Medium	0%	No	No Impact	No Impact		

Tree	Trees in group	Botanical name	Height (m)	Spread (m)	DBH (mm)	Health	Structure	Landscape significance	TPZ (m)	SRZ (m)	ULE	Retention value	TPZ Encroachment (%)	SRZ Impact	Calculated Impact	Proposed Impact	Notes on proposed impact	Notes on tree health
11	1	*Pinus radiata*	25	16	3000	Fair	Fair	Medium	15.0	5.3	Medium (15-40 years)	Medium	0%	No	No Impact	No Impact		Hanger 300mm
12	1	*Acacia decurrens*	13	5	300	Fair	Fair	Medium	3.6	2.0	Short (5-15 years)	Medium	0%	No	No Impact	No Impact		
13	1	*Salix alba*	15	5	300	Good	Good	Medium	3.6	2.0	Medium (15-40 years)	Medium	0%	No	Willow	Willow		
14	1	*Acacia decurrens*	10	3	150	Fair	Poor	Medium	2.0	1.5	Short (5-15 years)	Medium	0%	No	No Impact	No Impact		canopy supressed by Pinus hanger
15	1	*Acacia decurrens*	7	3	100	Poor	Fair	Medium	2.0	1.5	Short (5-15 years)	Medium	0%	No	No Impact	No Impact		
16	1	*Acacia decurrens*	10	3	100	Fair	Fair	Medium	2.0	1.5	Short (5-15 years)	Medium	0%	No	No Impact	No Impact		
17	1	*Pinus radiata*	18	9	600	Good	Good	Medium	7.2	2.7	Long (>40 years)	Medium	0%	No	No Impact	No Impact		
18	1	*Acacia decurrens*	14	7	250	Fair	Fair	Medium	3.0	1.9	Short (5-15 years)	Medium	0%	No	No Impact	No Impact		
19	1	*Salix alba*	16	4	300	Good	Good	Medium	3.6	2.0	Medium (15-40 years)	Medium	0%	No	Willow	Willow		
20	1	*Salix alba*	13	4	150	Fair	Fair	Medium	2.0	1.5	Medium (15-40 years)	Medium	0%	No	Willow	Willow		
21	1	*Pinus radiata*	11	8	600	Good	Good	High	7.2	2.7	Long (>40 years)	Medium	0%	No	No Impact	No Impact		
22	1	*Cupressus torulosa*	22	14	1700	Good	Good	High	15.0	4.1	Long (>40 years)	High	0%	No	No Impact	No Impact		

Tree	Trees in group	Botanical name	Height (m)	Spread (m)	DBH (mm)	Health	Structure	Landscape significance	TPZ (m)	SRZ (m)	ULE	Retention value	TPZ Encroachment (%)	SRZ Impact	Calculated Impact	Proposed Impact	Notes on proposed impact	Notes on tree health
23	1	*Cupressus torulosa*	17	12	1100	Good	Good	High	13.2	3.4	Long (>40 years)	High	0%	No	No Impact	No Impact		Multi trunked
24	1	*Pinus radiata*	20	9	800	Fair	Fair	Medium	9.6	3.0	Medium (15-40 years)	Medium	0%	No	No Impact	No Impact		
25	1	*Pinus radiata*	20	8	500	Fair	Fair	Medium	6.0	2.5	Medium (15-40 years)	Medium	0%	No	No Impact	No Impact		
26	1	*Pinus radiata*	21	7	500	Fair	Fair	Medium	6.0	2.5	Medium (15-40 years)	Medium	0%	No	No Impact	No Impact		
27	1	*Pinus radiata*	22	12	750	Fair	Fair	Medium	9.0	2.9	Medium (15-40 years)	Medium	0%	No	No Impact	No Impact		
28	6	*Salix babylonica*	14	8	350	Good	Good	Medium	4.2	2.1	Medium (15-40 years)	Medium	0%	No	Willow	Willow		Group of 6 along river
29	4	*Acacia longifolia*	7	3	150	Fair	Fair	Medium	2.0	1.5	Short (5-15 years)	Medium	0%	No	No Impact	No Impact		Group of 4 along river
30	2	*Acacia decurrens*	17	6	250	Good	Good	Medium	3.0	1.9	Short (5-15 years)	Medium	0%	No	No Impact	No Impact		Group of 2. Basal decay on smaller one
31	1	*Liquidambar styraciflua*	25	18	1500	Good	Good	High	15.0	3.9	Long (>40 years)	High	22%	No	Major Impact	High Impact		
32	1	*Cupressus x leylandii*	12	10	320	Fair	Fair	Medium	3.8	2.1	Medium (15-40 years)	High	0%	No	No Impact	No Impact		Multi trunked
33	1	*Liquidambar styraciflua*	14	12	700	Good	Fair	High	8.4	2.9	Long (>40 years)	High	0%	No	No Impact	No Impact		
34	1	*Cupressus macrocarpa*	16	14	2000	Good	Good	High	15.0	4.4	Long (>40 years)	High	14.9%	No	Major Impact	Medium Impact		

Tree	Trees in group	Botanical name	Height (m)	Spread (m)	DBH (mm)	Health	Structure	Landscape significance	TPZ (m)	SRZ (m)	ULE	Retention value	TPZ Encroachment (%)	SRZ Impact	Calculated Impact	Proposed Impact	Notes on proposed impact	Notes on tree health
35	1	*Cupressus macrocarpa*	15	13	1200	Good	Fair	High	14.4	3.6	Long (>40 years)	High	5.8%	No	Minor Impact	Low Impact		Multiple trunks
36	1	*Liquidambar styraciflua*	18	11	750	Fair	Poor	High	9.0	2.9	Medium (15-40 years)	High	0%	No	No Impact	No Impact		bracket fungi on dead limb + loss of large branches
37	1	*Cupressus macrocarpa*	16	18	1750	Good	Good	High	15.0	4.2	Long (>40 years)	High	0%	No	No Impact	No Impact		
38	1	*Acacia decurrens*	11	12	400	Fair	Fair	Low	4.8	2.3	Remove (<5 years)	Low	0%	No	No Impact	No Impact		decay
39	1	*Chamaecyparis sp.*	10	6	300	Fair	Fair	Medium	3.6	2.0	Long (>40 years)	High	0%	No	No Impact	No Impact		Multi trunked
40	1	*Cotoneaster sp.*	7	7	250	Fair	Fair	Medium	3.0	1.9	Medium (15-40 years)	Medium	0%	No	No Impact	No Impact		multi stemmed and identified as tree significant to owner
41	1	*Ilex sp.*	5	7	100	Good	Fair	Medium	2.0	1.5	Medium (15-40 years)	Medium	0%	No	No Impact	No Impact		Multi trunked
42	1	*Chamaecyparis sp.*	16	11	500	Good	Good	High	6.0	2.5	Long (>40 years)	High	0%	No	No Impact	No Impact		Multi trunked
43	1	*Fraxinus excelsior*	9	8	300	Fair	Fair	Medium	3.6	2.0	Medium (15-40 years)	Medium	0%	No	No Impact	No Impact		Multi trunked
44	1	*Salix alba*	19	11	400	Good	Fair	Medium	4.8	2.3	Medium (15-40 years)	Medium	0%	No	Willow	Willow		
45	1	*Ulmus sp.*	5	4	100	Poor	Fair	Low	2.0	1.5	Remove (<5 years)	Low	0%	No	No Impact	No Impact		
46	1	*Salix alba*	15	7	250	Fair	Fair	Medium	3.0	1.9	Medium (15-40 years)	Medium	0%	No	Willow	Willow		Multistemmed

Tree	Trees in group	Botanical name	Height (m)	Spread (m)	DBH (mm)	Health	Structure	Landscape significance	TPZ (m)	SRZ (m)	ULE	Retention value	TPZ Encroachment (%)	SRZ Impact	Calculated Impact	Proposed Impact	Notes on proposed impact	Notes on tree health
47	1	*Salix alba*	10	2	100	Fair	Fair	Low	2.0	1.5	Medium (15-40 years)	Low	0%	No	Willow	Willow		Sapling
48	1	*Salix alba*	12	2	100	Fair	Fair	Low	2.0	1.5	Medium (15-40 years)	Low	0%	No	Willow	Willow		sapling
49	1	*Acacia decurrens*	15	5	250	Fair	Poor	Low	3.0	1.9	Short (5-15 years)	Low	0%	No	No Impact	No Impact		
50	5	*Salix alba*	16	6	300	Fair	Fair	Medium	3.6	2.0	Medium (15-40 years)	Medium	0%	No	Willow	Willow		Grouping of 5 trunks
51	1	*Acacia decurrens*	13	5	200	Poor	Poor	Low	2.4	1.7	Remove (<5 years)	Low	0%	No	No Impact	No Impact		Decay
52	1	*Acacia decurrens*	8	4	100	Fair	Fair	Low	2.0	1.5	Remove (<5 years)	Low	0%	No	No Impact	No Impact		Fire at base. on slope next to river
53	1	*Acacia decurrens*	7	6	250	Fair	Fair	Low	3.0	1.9	Short (5-15 years)	Low	0%	No	No Impact	No Impact		leaning + raised rootball
54	1	*Acacia decurrens*	14	6	350	Fair	Fair	Low	4.2	2.1	Remove (<5 years)	Low	0%	No	No Impact	No Impact		decay
55	1	*Acacia decurrens*	9	8	400	Poor	Poor	Low	4.8	2.3	Remove (<5 years)	Low	0%	No	No Impact	No Impact		decay
56	1	*Acacia decurrens*	8	4	100	Poor	Fair	Low	2.0	1.5	Remove (<5 years)	Low	0%	No	No Impact	No Impact		
57	1	*Acacia decurrens*	6	8	350	Fair	Poor	Low	4.2	2.1	Remove (<5 years)	Low	0%	No	No Impact	No Impact		significant lean. root ball exposed
58	1	*Acacia decurrens*	6	8	200	Fair	Poor	Low	2.4	1.7	Remove (<5 years)	Low	0%	No	No Impact	No Impact		significant lean. root ball exposed

Tree	Trees in group	Botanical name	Height (m)	Spread (m)	DBH (mm)	Health	Structure	Landscape significance	TPZ (m)	SRZ (m)	ULE	Retention value	TPZ Encroachment (%)	SRZ Impact	Calculated Impact	Proposed Impact	Notes on proposed impact	Notes on tree health
59	1	*Salix alba*	13	6	300	Good	Good	Medium	3.6	2.0	Medium (15-40 years)	Medium	0%	No	Willow	Willow		
60	1	*Salix alba*	18	16	1400	Good	Good	Medium	15.0	3.8	Medium (15-40 years)	High	0%	No	Willow	Willow		Multiple trunks
61	1	*Cupressus sempervirens*	15	10	900	Good	Good	High	10.8	3.2	Long (>40 years)	High	0%	No	No Impact	No Impact		
62	1	*Salix alba*	20	9	500	Fair	Fair	Medium	6.0	2.5	Short (5-15 years)	Medium	0%	No	Willow	Willow		multitrunked + half root plate expoosed closest to river
63	1	*Salix alba*	22	13	1200	Good	Good	Medium	14.4	3.6	Medium (15-40 years)	Medium	0%	No	Willow	Willow		Multi trunked
64	1	*Salix alba*	21	9	1000	Fair	Poor	Low	12.0	3.3	Remove (<5 years)	Low	0%	No	Willow	Willow		deadwood + decay + root ball exposed on creek side
65	1	*Salix babylonica*	9	11	1000	Poor	Poor	Low	12.0	3.3	Remove (<5 years)	Low	0%	No	Willow	Willow		deadwood + root ball exposed on creek side
66	1	*Acacia decurrens*	11	7	350	Fair	Fair	Medium	4.2	2.1	Short (5-15 years)	Medium	0%	No	No Impact	No Impact		inclusion + decay
67	1	*Acacia decurrens*	10	6	200	Fair	Poor	Low	2.4	1.7	Remove (<5 years)	Low	0%	No	No Impact	No Impact		root ball exposed
68	1	*Acacia decurrens*	11	5	150	Poor	Poor	Low	2.0	1.5	Remove (<5 years)	Low	0%	No	No Impact	No Impact		roots exposed
69	4	*Salix alba*	13	4	100	Fair	Poor	Low	2.0	1.5	Remove (<5 years)	Low	0%	No	Willow	Willow		group of 4 stems in creek
70	1	*Salix alba*	11	4	200	Fair	Fair	Medium	2.4	1.7	Short (5-15 years)	Low	0%	No	Willow	Willow		trunk base in creek

Tree	Trees in group	Botanical name	Height (m)	Spread (m)	DBH (mm)	Health	Structure	Landscape significance	TPZ (m)	SRZ (m)	ULE	Retention value	TPZ Encroachment (%)	SRZ Impact	Calculated Impact	Proposed Impact	Notes on proposed impact	Notes on tree health
71	3	*Salix alba*	12	2	100	Poor	Poor	Low	2.0	1.5	Remove (<5 years)	Low	0%	No	Willow	Willow		Heavily supressed. minimum canopy + group of 3 small trunks in creek
72	1	*Salix alba*	17	6	350	Fair	Fair	Medium	4.2	2.1	Short (5-15 years)	Medium	0%	No	Willow	Willow		supressed canopy by leaning Acacia on other side of creek
73	1	*Pinus radiata*	28	18	1500	Fair	Fair	High	15.0	3.9	Medium (15-40 years)	High	0.5%	No	Minor Impact	Low Impact		
74A	1	*Cupressus sempervirens*	18	10	800	Good	Good	High	9.6	3.0	Long (>40 years)	High	0%	No	No Impact	No Impact		
74B	1	*Cupressus sempervirens*	18	10	800	Good	Good	High	9.6	3.0	Long (>40 years)	High	0%	No	No Impact	No Impact		
74C	1	*Cupressus sempervirens*	18	10	800	Good	Good	High	9.6	3.0	Long (>40 years)	High	0%	No	No Impact	No Impact		
74D	1	*Cupressus sempervirens*	18	10	800	Good	Good	High	9.6	3.0	Long (>40 years)	High	0%	No	No Impact	No Impact		
74E	1	*Cupressus sempervirens*	18	10	800	Good	Good	High	9.6	3.0	Long (>40 years)	High	0%	No	No Impact	No Impact		
74F	1	*Cupressus sempervirens*	18	10	800	Good	Good	High	9.6	3.0	Long (>40 years)	High	0%	No	No Impact	No Impact		
74G	1	*Cupressus sempervirens*	18	10	800	Good	Good	High	9.6	3.0	Long (>40 years)	High	0%	No	No Impact	No Impact		
74H	1	*Cupressus sempervirens*	18	10	800	Good	Good	High	9.6	3.0	Long (>40 years)	High	0%	No	No Impact	No Impact		

Tree	Trees in group	Botanical name	Height (m)	Spread (m)	DBH (mm)	Health	Structure	Landscape significance	TPZ (m)	SRZ (m)	ULE	Retention value	TPZ Encroachment (%)	SRZ Impact	Calculated Impact	Proposed Impact	Notes on proposed impact	Notes on tree health
74I	1	*Cupressus sempervirens*	18	10	800	Good	Good	High	9.6	3.0	Long (>40 years)	High	0%	No	No Impact	No Impact		
74J	1	*Cupressus sempervirens*	18	10	800	Good	Good	High	9.6	3.0	Long (>40 years)	High	0%	No	No Impact	No Impact		
74K	1	*Cupressus sempervirens*	18	10	800	Good	Good	High	9.6	3.0	Long (>40 years)	High	0%	No	No Impact	No Impact		
75A	1	*Cupressus sempervirens*	18	8	600	Good	Good	High	7.2	2.7	Long (>40 years)	High	0%	No	No Impact	No Impact		
75B	1	*Cupressus sempervirens*	18	8	600	Good	Good	High	7.2	2.7	Long (>40 years)	High	0%	No	No Impact	No Impact		
75C	1	*Cupressus sempervirens*	18	8	600	Good	Good	High	7.2	2.7	Long (>40 years)	High	0%	No	No Impact	No Impact		
75D	1	*Cupressus sempervirens*	18	8	600	Good	Good	High	7.2	2.7	Long (>40 years)	High	0%	No	No Impact	No Impact		
75E	1	*Cupressus sempervirens*	18	8	600	Good	Good	High	7.2	2.7	Long (>40 years)	High	0%	No	No Impact	No Impact		
75F	1	*Cupressus sempervirens*	18	8	600	Good	Good	High	7.2	2.7	Long (>40 years)	High	0%	No	No Impact	No Impact		
75G	1	*Cupressus sempervirens*	18	8	600	Good	Good	High	7.2	2.7	Long (>40 years)	High	0%	No	No Impact	No Impact		
75H	1	*Cupressus sempervirens*	18	8	600	Good	Good	High	7.2	2.7	Long (>40 years)	High	0%	No	No Impact	No Impact		
75I	1	*Cupressus sempervirens*	18	8	600	Good	Good	High	7.2	2.7	Long (>40 years)	High	0%	No	No Impact	No Impact		

Tree	Trees in group	Botanical name	Height (m)	Spread (m)	DBH (mm)	Health	Structure	Landscape significance	TPZ (m)	SRZ (m)	ULE	Retention value	TPZ Encroachment (%)	SRZ Impact	Calculated Impact	Proposed Impact	Notes on proposed impact	Notes on tree health
75J	1	*Cupressus sempervirens*	18	8	600	Good	Good	High	7.2	2.7	Long (>40 years)	High	0%	No	No Impact	No Impact		
75K	1	*Cupressus sempervirens*	18	8	600	Good	Good	High	7.2	2.7	Long (>40 years)	High	0%	No	No Impact	No Impact		
75L	1	*Cupressus sempervirens*	18	8	600	Good	Good	High	7.2	2.7	Long (>40 years)	High	0%	No	No Impact	No Impact		
75M	1	*Cupressus sempervirens*	18	8	600	Good	Good	High	7.2	2.7	Long (>40 years)	High	0%	No	No Impact	No Impact		
75N	1	*Cupressus sempervirens*	18	8	600	Good	Good	High	7.2	2.7	Long (>40 years)	High	0%	No	No Impact	No Impact		
76A	1	*Cupressus sempervirens*	18	8	600	Good	Good	High	7.2	2.7	Long (>40 years)	High	0%	No	No Impact	No Impact		
75O	1	*Cupressus sempervirens*	18	7	700	Good	Good	High	8.4	2.9	Long (>40 years)	High	0%	No	No Impact	No Impact		
76B	1	*Cupressus sempervirens*	18	7	700	Good	Good	High	8.4	2.9	Long (>40 years)	High	0%	No	No Impact	No Impact		
76C	1	*Cupressus sempervirens*	18	7	700	Good	Good	High	8.4	2.9	Long (>40 years)	High	0%	No	No Impact	No Impact		
76D	1	*Cupressus sempervirens*	18	7	700	Good	Good	High	8.4	2.9	Long (>40 years)	High	0%	No	No Impact	No Impact		
76E	1	*Cupressus sempervirens*	18	7	700	Good	Good	High	8.4	2.9	Long (>40 years)	High	0%	No	No Impact	No Impact		
76F	1	*Cupressus sempervirens*	18	7	700	Good	Good	High	8.4	2.9	Long (>40 years)	High	0%	No	No Impact	No Impact		

Tree	Trees in group	Botanical name	Height (m)	Spread (m)	DBH (mm)	Health	Structure	Landscape significance	TPZ (m)	SRZ (m)	ULE	Retention value	TPZ Encroachment (%)	SRZ Impact	Calculated Impact	Proposed Impact	Notes on proposed impact	Notes on tree health
76G	1	*Cupressus sempervirens*	18	7	700	Good	Good	High	8.4	2.9	Long (>40 years)	High	0%	No	No Impact	No Impact		
76H	1	*Cupressus sempervirens*	18	7	700	Good	Good	High	8.4	2.9	Long (>40 years)	High	2.4%	No	Minor Impact	Low Impact	Retain as per section 3	
76I	1	*Cupressus sempervirens*	18	7	700	Good	Good	High	8.4	2.9	Long (>40 years)	High	15.9%	Yes	Major Impact	Low Impact	Retain as per section 3	
76J	1	*Cupressus sempervirens*	18	7	700	Good	Good	High	8.4	2.9	Long (>40 years)	High	24.9%	Yes	Major Impact	Low Impact	Retain as per section 3	
77A	1	*Cupressus sempervirens*	16	6	500	Good	Good	High	6.0	2.5	Long (>40 years)	High	25.9%	Yes	Major Impact	Low Impact	Retain as per section 3	
77B	1	*Cupressus sempervirens*	16	6	500	Good	Good	High	6.0	2.5	Long (>40 years)	High	14.4%	No	Major Impact	Low Impact	Retain as per section 3	
77C	1	*Cupressus sempervirens*	16	6	500	Good	Good	High	6.0	2.5	Long (>40 years)	High	21.8%	No	Major Impact	Low Impact	Retain as per section 3	
77D	1	*Cupressus sempervirens*	16	6	500	Good	Good	High	6.0	2.5	Long (>40 years)	High	15.3%	No	Major Impact	Low Impact	Retain as per section 3	
77E	1	*Cupressus sempervirens*	16	6	500	Good	Good	High	6.0	2.5	Long (>40 years)	High	19.9%	No	Major Impact	Low Impact	Retain as per section 3	
77F	1	*Cupressus sempervirens*	16	6	500	Good	Good	High	6.0	2.5	Long (>40 years)	High	15.5%	No	Major Impact	Low Impact	Retain as per section 3	
77G	1	*Cupressus sempervirens*	16	6	500	Good	Good	High	6.0	2.5	Long (>40 years)	High	15.9%	No	Major Impact	Low Impact	Retain as per section 3	
77H	1	*Cupressus sempervirens*	16	6	500	Good	Good	High	6.0	2.5	Long (>40 years)	High	11.7%	No	Major Impact	Low Impact	Retain as per section 3	

Tree	Trees in group	Botanical name	Height (m)	Spread (m)	DBH (mm)	Health	Structure	Landscape significance	TPZ (m)	SRZ (m)	ULE	Retention value	TPZ Encroachment (%)	SRZ Impact	Calculated Impact	Proposed Impact	Notes on proposed impact	Notes on tree health
77I	1	*Cupressus sempervirens*	16	6	500	Good	Good	High	6.0	2.5	Long (>40 years)	High	10.9%	No	Major Impact	Low Impact	Retain as per section 3	
77J	1	*Cupressus sempervirens*	16	6	500	Good	Good	High	6.0	2.5	Long (>40 years)	High	12.7%	No	Major Impact	Low Impact	Retain as per section 3	
78A	1	*Cupressus sempervirens*	18	8	600	Good	Good	High	7.2	2.7	Long (>40 years)	High	20.9%	No	Major Impact	Low Impact	Retain as per section 3	
78B	1	*Cupressus sempervirens*	18	8	600	Good	Good	High	7.2	2.7	Long (>40 years)	High	15.9%	No	Major Impact	Low Impact	Retain as per section 3	
78C	1	*Cupressus sempervirens*	18	8	600	Good	Good	High	7.2	2.7	Long (>40 years)	High	6.7%	No	Minor Impact	Low Impact	Retain as per section 3	
78D	1	*Cupressus sempervirens*	18	8	600	Good	Good	High	7.2	2.7	Long (>40 years)	High	9.8%	No	Minor Impact	Low Impact	Retain as per section 3	
78E	1	*Cupressus sempervirens*	18	8	600	Good	Good	High	7.2	2.7	Long (>40 years)	High	5%	No	Minor Impact	Low Impact	Retain as per section 3	
78F	1	*Cupressus sempervirens*	18	8	600	Good	Good	High	7.2	2.7	Long (>40 years)	High	4%	No	Minor Impact	Low Impact	Retain as per section 3	
78G	1	*Cupressus sempervirens*	18	8	600	Good	Good	High	7.2	2.7	Long (>40 years)	High	0.9%	No	Minor Impact	Low Impact	Retain as per section 3	
78H	1	*Cupressus sempervirens*	18	8	600	Good	Good	High	7.2	2.7	Long (>40 years)	High	0%	No	No Impact	No Impact		
78I	1	*Cupressus sempervirens*	18	8	600	Good	Good	High	7.2	2.7	Long (>40 years)	High	0%	No	No Impact	No Impact		
78J	1	*Cupressus sempervirens*	18	8	600	Good	Good	High	7.2	2.7	Long (>40 years)	High	0%	No	No Impact	No Impact		

Tree	Trees in group	Botanical name	Height (m)	Spread (m)	DBH (mm)	Health	Structure	Landscape significance	TPZ (m)	SRZ (m)	ULE	Retention value	TPZ Encroachment (%)	SRZ Impact	Calculated Impact	Proposed Impact	Notes on proposed impact	Notes on tree health
79A	1	*Cupressus sempervirens*	15	7	400	Good	Good	High	4.8	2.3	Long (>40 years)	High	0%	No	No Impact	No Impact		
79B	1	*Cupressus sempervirens*	15	7	400	Good	Good	High	4.8	2.3	Long (>40 years)	High	0%	No	No Impact	No Impact		
79C	1	*Cupressus sempervirens*	15	7	400	Good	Good	High	4.8	2.3	Long (>40 years)	High	0%	No	No Impact	No Impact		
79D	1	*Cupressus sempervirens*	15	7	400	Good	Good	High	4.8	2.3	Long (>40 years)	High	0%	No	No Impact	No Impact		
79E	1	*Cupressus sempervirens*	15	7	400	Good	Good	High	4.8	2.3	Long (>40 years)	High	0%	No	No Impact	No Impact		
79F	1	*Cupressus sempervirens*	15	7	400	Good	Good	High	4.8	2.3	Long (>40 years)	High	0%	No	No Impact	No Impact		
79G	1	*Cupressus sempervirens*	15	7	400	Good	Good	High	4.8	2.3	Long (>40 years)	High	0%	No	No Impact	No Impact		
79H	1	*Cupressus sempervirens*	15	7	400	Good	Good	High	4.8	2.3	Long (>40 years)	High	0%	No	No Impact	No Impact		
79I	1	*Cupressus sempervirens*	15	7	400	Good	Good	High	4.8	2.3	Long (>40 years)	High	0%	No	No Impact	No Impact		
79J	1	*Cupressus sempervirens*	15	7	400	Good	Good	High	4.8	2.3	Long (>40 years)	High	0%	No	No Impact	No Impact		
80A	1	*Cupressus sempervirens*	18	7	600	Good	Good	High	7.2	2.7	Long (>40 years)	High	0%	No	No Impact	No Impact		
80B	1	*Cupressus sempervirens*	18	7	600	Good	Good	High	7.2	2.7	Long (>40 years)	High	0%	No	No Impact	No Impact		

Tree	Trees in group	Botanical name	Height (m)	Spread (m)	DBH (mm)	Health	Structure	Landscape significance	TPZ (m)	SRZ (m)	ULE	Retention value	TPZ Encroachment (%)	SRZ Impact	Calculated Impact	Proposed Impact	Notes on proposed impact	Notes on tree health
80C	1	*Cupressus sempervirens*	18	7	600	Good	Good	High	7.2	2.7	Long (>40 years)	High	0%	No	No Impact	No Impact		
80D	1	*Cupressus sempervirens*	18	7	600	Good	Good	High	7.2	2.7	Long (>40 years)	High	0%	No	No Impact	No Impact		
80E	1	*Cupressus sempervirens*	18	7	600	Good	Good	High	7.2	2.7	Long (>40 years)	High	0%	No	No Impact	No Impact		
80F	1	*Cupressus sempervirens*	18	7	600	Good	Good	High	7.2	2.7	Long (>40 years)	High	0%	No	Minor Impact	Low Impact	Retain as per section 3	
80G	1	*Cupressus sempervirens*	18	7	600	Good	Good	High	7.2	2.7	Long (>40 years)	High	1.9%	No	Minor Impact	Low Impact	Retain as per section 3	
80H	1	*Cupressus sempervirens*	18	7	600	Good	Good	High	7.2	2.7	Long (>40 years)	High	3.7%	No	Minor Impact	Low Impact	Retain as per section 3	
80I	1	*Cupressus sempervirens*	18	7	600	Good	Good	High	7.2	2.7	Long (>40 years)	High	7.3%	No	Minor Impact	Low Impact	Retain as per section 3	
80J	1	*Cupressus sempervirens*	18	7	600	Good	Good	High	7.2	2.7	Long (>40 years)	High	11.2%	No	Major Impact	Low Impact	Retain as per section 3	
81A	1	*Cupressus sempervirens*	18	7	700	Good	Good	High	8.4	2.9	Long (>40 years)	High	21.8%	No	Major Impact	Low Impact	Retain as per section 3	
81B	1	*Cupressus sempervirens*	18	7	700	Good	Good	High	8.4	2.9	Long (>40 years)	High	24%	No	Major Impact	Low Impact	Retain as per section 3	
81C	1	*Cupressus sempervirens*	18	7	700	Good	Good	High	8.4	2.9	Long (>40 years)	High	23.6%	No	Major Impact	Low Impact	Retain as per section 3	
81D	1	*Cupressus sempervirens*	18	7	700	Good	Good	High	8.4	2.9	Long (>40 years)	High	21.2%	No	Major Impact	Low Impact	Retain as per section 3	

Tree	Trees in group	Botanical name	Height (m)	Spread (m)	DBH (mm)	Health	Structure	Landscape significance	TPZ (m)	SRZ (m)	ULE	Retention value	TPZ Encroachment (%)	SRZ Impact	Calculated Impact	Proposed Impact	Notes on proposed impact	Notes on tree health
81E	1	*Cupressus sempervirens*	18	7	700	Good	Good	High	8.4	2.9	Long (>40 years)	High	21.9%	No	Major Impact	Low Impact	Retain as per section 3	
81F	1	*Cupressus sempervirens*	18	7	700	Good	Good	High	8.4	2.9	Long (>40 years)	High	21.5%	No	Major Impact	Low Impact	Retain as per section 3	
81G	1	*Cupressus sempervirens*	18	7	700	Good	Good	High	8.4	2.9	Long (>40 years)	High	21.3%	No	Major Impact	Low Impact	Retain as per section 3	
81H	1	*Cupressus sempervirens*	18	7	700	Good	Good	High	8.4	2.9	Long (>40 years)	High	23%	No	Major Impact	Low Impact	Retain as per section 3	
81I	1	*Cupressus sempervirens*	18	7	700	Good	Good	High	8.4	2.9	Long (>40 years)	High	23.7%	No	Major Impact	Low Impact	Retain as per section 3	
81J	1	*Cupressus sempervirens*	18	7	700	Good	Good	High	8.4	2.9	Long (>40 years)	High	24.4%	No	Major Impact	Low Impact	Retain as per section 3	
82A	1	*Cupressus sempervirens*	16	7	500	Good	Good	High	6.0	2.5	Long (>40 years)	High	21.8%	No	Major Impact	Low Impact	Retain as per section 3	
82B	1	*Cupressus sempervirens*	16	7	500	Good	Good	High	6.0	2.5	Long (>40 years)	High	21.7%	No	Major Impact	Low Impact	Retain as per section 3	
82C	1	*Cupressus sempervirens*	16	7	500	Good	Good	High	6.0	2.5	Long (>40 years)	High	20.7%	No	Major Impact	Low Impact	Retain as per section 3	
82D	1	*Cupressus sempervirens*	16	7	500	Good	Good	High	6.0	2.5	Long (>40 years)	High	18.5%	No	Major Impact	Low Impact	Retain as per section 3	
82E	1	*Cupressus sempervirens*	16	7	500	Good	Good	High	6.0	2.5	Long (>40 years)	High	16%	No	Major Impact	Low Impact	Retain as per section 3	
82F	1	*Cupressus sempervirens*	16	7	500	Good	Good	High	6.0	2.5	Long (>40 years)	High	16.4%	No	Major Impact	Low Impact	Retain as per section 3	

Tree	Trees in group	Botanical name	Height (m)	Spread (m)	DBH (mm)	Health	Structure	Landscape significance	TPZ (m)	SRZ (m)	ULE	Retention value	TPZ Encroachment (%)	SRZ Impact	Calculated Impact	Proposed Impact	Notes on proposed impact	Notes on tree health
82G	1	*Cupressus sempervirens*	16	7	500	Good	Good	High	6.0	2.5	Long (>40 years)	High	12.9%	No	Major Impact	Low Impact	Retain as per section 3	
82H	1	*Cupressus sempervirens*	16	7	500	Good	Good	High	6.0	2.5	Long (>40 years)	High	8.8%	No	Minor Impact	Low Impact	Retain as per section 3	
82I	1	*Cupressus sempervirens*	16	7	500	Good	Good	High	6.0	2.5	Long (>40 years)	High	7%	No	Minor Impact	Low Impact	Retain as per section 3	
82J	1	*Cupressus sempervirens*	16	7	500	Good	Good	High	6.0	2.5	Long (>40 years)	High	10.4%	No	Major Impact	Low Impact	Retain as per section 3	
83A	1	*Cupressus sempervirens*	16	7	500	Good	Good	High	6.0	2.5	Long (>40 years)	High	14.7%	No	Major Impact	Low Impact	Retain as per section 3	
83B	1	*Cupressus sempervirens*	16	7	500	Good	Good	High	6.0	2.5	Long (>40 years)	High	13.3%	No	Major Impact	Low Impact	Retain as per section 3	
83C	1	*Cupressus sempervirens*	16	7	500	Good	Good	High	6.0	2.5	Long (>40 years)	High	8.7%	No	Minor Impact	Low Impact	Retain as per section 3	
83D	1	*Cupressus sempervirens*	16	7	500	Good	Good	High	6.0	2.5	Long (>40 years)	High	5.8%	No	Minor Impact	Low Impact	Retain as per section 3	
83E	1	*Cupressus sempervirens*	16	7	500	Good	Good	High	6.0	2.5	Long (>40 years)	High	1.4%	No	Minor Impact	Low Impact	Retain as per section 3	
83F	1	*Cupressus sempervirens*	16	7	500	Good	Good	High	6.0	2.5	Long (>40 years)	High	0%	No	No Impact	No Impact		
83G	1	*Cupressus sempervirens*	16	7	500	Good	Good	High	6.0	2.5	Long (>40 years)	High	0%	No	No Impact	No Impact		
83H	1	*Cupressus sempervirens*	16	7	500	Good	Good	High	6.0	2.5	Long (>40 years)	High	0%	No	No Impact	No Impact		

Tree	Trees in group	Botanical name	Height (m)	Spread (m)	DBH (mm)	Health	Structure	Landscape significance	TPZ (m)	SRZ (m)	ULE	Retention value	TPZ Encroachment (%)	SRZ Impact	Calculated Impact	Proposed Impact	Notes on proposed impact	Notes on tree health
83I	1	*Cupressus sempervirens*	16	7	500	Good	Good	High	6.0	2.5	Long (>40 years)	High	0%	No	No Impact	No Impact		
83J	1	*Cupressus sempervirens*	16	7	500	Good	Good	High	6.0	2.5	Long (>40 years)	High	0%	No	No Impact	No Impact		
84A	1	*Cupressus sempervirens*	16	6	500	Good	Good	High	6.0	2.5	Long (>40 years)	High	0%	No	No Impact	No Impact		
84B	1	*Cupressus sempervirens*	16	6	500	Good	Good	High	6.0	2.5	Long (>40 years)	High	1.5%	No	Minor Impact	Low Impact	Retain as per section 3	
84C	1	*Cupressus sempervirens*	16	6	500	Good	Good	High	6.0	2.5	Long (>40 years)	High	6.2%	No	Minor Impact	Low Impact	Retain as per section 3	
84D	1	*Cupressus sempervirens*	16	6	500	Good	Good	High	6.0	2.5	Long (>40 years)	High	12.2%	No	Major Impact	Low Impact	Retain as per section 3	
84E	1	*Cupressus sempervirens*	16	6	500	Good	Good	High	6.0	2.5	Long (>40 years)	High	12.7%	No	Major Impact	Low Impact	Retain as per section 3	
84F	1	*Cupressus sempervirens*	16	6	500	Good	Good	High	6.0	2.5	Long (>40 years)	High	7.6%	No	Minor Impact	Low Impact	Retain as per section 3	
84G	1	*Cupressus sempervirens*	16	6	500	Good	Good	High	6.0	2.5	Long (>40 years)	High	2%	No	Minor Impact	Low Impact	Retain as per section 3	
84H	1	*Cupressus sempervirens*	16	6	500	Good	Good	High	6.0	2.5	Long (>40 years)	High	4.3%	No	Minor Impact	Low Impact	Retain as per section 3	
84I	1	*Cupressus sempervirens*	16	6	500	Good	Good	High	6.0	2.5	Long (>40 years)	High	4.9%	No	Minor Impact	Low Impact	Retain as per section 3	
84J	1	*Cupressus sempervirens*	16	6	500	Good	Good	High	6.0	2.5	Long (>40 years)	High	6.1%	No	Minor Impact	Low Impact	Retain as per section 3	

Tree	Trees in group	Botanical name	Height (m)	Spread (m)	DBH (mm)	Health	Structure	Landscape significance	TPZ (m)	SRZ (m)	ULE	Retention value	TPZ Encroachment (%)	SRZ Impact	Calculated Impact	Proposed Impact	Notes on proposed impact	Notes on tree health
85A	1	*Cupressus sempervirens*	16	5	600	Good	Good	High	7.2	2.7	Long (>40 years)	High	15.7%	No	Major Impact	Low Impact	Retain as per section 3	
85B	1	*Cupressus sempervirens*	16	5	600	Good	Good	High	7.2	2.7	Long (>40 years)	High	15.8%	No	Major Impact	Low Impact	Retain as per section 3	
85C	1	*Cupressus sempervirens*	16	5	600	Good	Good	High	7.2	2.7	Long (>40 years)	High	21.2%	No	Major Impact	Low Impact	Retain as per section 3	
85D	1	*Cupressus sempervirens*	16	5	600	Good	Good	High	7.2	2.7	Long (>40 years)	High	19.5%	No	Major Impact	Low Impact	Retain as per section 3	
85E	1	*Cupressus sempervirens*	16	5	600	Good	Good	High	7.2	2.7	Long (>40 years)	High	21.7%	No	Major Impact	Low Impact	Retain as per section 3	
85F	1	*Cupressus sempervirens*	16	5	600	Good	Good	High	7.2	2.7	Long (>40 years)	High	20%	No	Major Impact	Low Impact	Retain as per section 3	
85G	1	*Cupressus sempervirens*	16	5	600	Good	Good	High	7.2	2.7	Long (>40 years)	High	15.3%	No	Major Impact	Low Impact	Retain as per section 3	
85H	1	*Cupressus sempervirens*	16	5	600	Good	Good	High	7.2	2.7	Long (>40 years)	High	4.2%	No	Minor Impact	Low Impact	Retain as per section 3	
85I	1	*Cupressus sempervirens*	16	5	600	Good	Good	High	7.2	2.7	Long (>40 years)	High	0%	No	No Impact	No Impact		
85J	1	*Cupressus sempervirens*	16	5	600	Good	Good	High	7.2	2.7	Long (>40 years)	High	0%	No	No Impact	No Impact		
86	1	*Acacia decurrens*	10	7	300	Fair	Fair	Low	3.6	2.0	Remove (<5 years)	Low	96.7%	Yes	Major Impact	High Impact	Remove and offset due to gravel carpark	significant lean + root plate raised

Tree	Trees in group	Botanical name	Height (m)	Spread (m)	DBH (mm)	Health	Structure	Landscape significance	TPZ (m)	SRZ (m)	ULE	Retention value	TPZ Encroachment (%)	SRZ Impact	Calculated Impact	Proposed Impact	Notes on proposed impact	Notes on tree health
87	1	*Salix alba*	15	9	300	Fair	Fair	Medium	3.6	2.0	Medium (15-40 years)	Medium	100%	Yes	Willow	Willow		Multi trunked
89	1	*Salix alba*	15	7	300	Fair	Fair	Medium	3.6	2.0	Medium (15-40 years)	Medium	100%	Yes	Willow	Willow		Multi trunked
89	1	*Salix alba*	15	9	300	Fair	Fair	Medium	3.6	2.0	Short (5-15 years)	Medium	100%	Yes	Willow	Willow		raised mound at base
90	1	*Acacia longifolia*	11	5	220	Good	Good	Medium	2.6	1.8	Short (5-15 years)	Medium	100%	Yes	Major Impact	High Impact	Remove and offset due to gravel carpark	
91	1	*Acacia decurrens*	10	5	250	Fair	Fair	Low	3.0	1.9	Remove (<5 years)	Low	100%	Yes	Major Impact	High Impact	Remove and offset due to gravel carpark	kino + decay present
92	1	*Acacia decurrens*	10	2	100	Poor	Poor	Low	2.0	1.5	Remove (<5 years)	Low	100%	Yes	Major Impact	High Impact	Remove and offset due to gravel carpark	kino + decay present
93	1	*Eucalyptus sp.*	14	7	500	Good	Good	High	6.0	2.5	Long (>40 years)	High	68.3%	Yes	Major Impact	Low Impact	Retain as per section 3	
94	1	*Eucalyptus sp.*	15	8	450	Good	Good	High	5.4	2.4	Long (>40 years)	High	100%	Yes	Major Impact	Low Impact	Retain as per section 3	
95	1	*Eucalyptus sp.*	13	5	300	Poor	Fair	Medium	3.6	2.0	Short (5-15 years)	Medium	26.6%	Yes	Major Impact	High Impact	Remove and offset due to gravel carpark	mechanical damage

Tree	Trees in group	Botanical name	Height (m)	Spread (m)	DBH (mm)	Health	Structure	Landscape significance	TPZ (m)	SRZ (m)	ULE	Retention value	TPZ Encroachment (%)	SRZ Impact	Calculated Impact	Proposed Impact	Notes on proposed impact	Notes on tree health
96	1	*Salix alba*	12	7	240	Fair	Fair	Medium	2.9	1.8	Medium (15-40 years)	Medium	0%	No	Willow	Willow		
97	1	*Eucalyptus oreades*	26	24	2000	Good	Good	High	15.0	4.4	Medium (15-40 years)	High	0%	No	No Impact	No Impact		significant tree + co dominant stems
98	1	*Acacia decurrens*	14	8	450	Fair	Poor	Medium	5.4	2.4	Short (5-15 years)	Medium	34.2%	Yes	Major Impact	Low Impact	Retain as per section 3	root plate exposed
99	1	*Salix alba*	16	11	320	Good	Good	Medium	3.8	2.1	Medium (15-40 years)	Medium	66.1%	Yes	Willow	Willow		
100	1	*Acacia longifolia*	9	9	220	Fair	Poor	Medium	2.6	1.8	Remove (<5 years)	Low	0%	No	No Impact	No Impact		multi trunked + leaning
101	1	*Acacia longifolia*	8	3	200	Fair	Poor	Low	2.4	1.7	Remove (<5 years)	Low	0%	No	No Impact	No Impact		suppressed by leaning neighbour Acacia decurrens
102	1	*Acacia decurrens*	11	5	250	Fair	Poor	Low	3.0	1.9	Remove (<5 years)	Low	0%	No	No Impact	No Impact		Leaning
103	1	*Eucalyptus sp.*	13	5	300	Fair	Fair	Medium	3.6	2.0	Long (>40 years)	Medium	0%	No	No Impact	No Impact		
104	1	*Acacia decurrens*	9	4	150	Fair	Fair	Medium	2.0	1.5	Short (5-15 years)	Medium	0%	No	No Impact	No Impact		
105	1	*Acacia decurrens*	7	5	120	Fair	Poor	Low	2.0	1.5	Remove (<5 years)	Low	0%	No	No Impact	No Impact		growing with t103
106	1	*Eucalyptus sp.*	15	6	400	Good	Good	High	4.8	2.3	Long (>40 years)	High	5.7%	No	Minor Impact	Low Impact	Retain as per section 3	
107	1	*Acacia decurrens*	16	5	280	Fair	Fair	Medium	3.4	1.9	Short (5-15 years)	Medium	0%	No	No Impact	No Impact		

Tree	Trees in group	Botanical name	Height (m)	Spread (m)	DBH (mm)	Health	Structure	Landscape significance	TPZ (m)	SRZ (m)	ULE	Retention value	TPZ Encroachment (%)	SRZ Impact	Calculated Impact	Proposed Impact	Notes on proposed impact	Notes on tree health
108	1	*Acacia decurrens*	17	9	450	Fair	Fair	Medium	5.4	2.4	Short (5-15 years)	Medium	32.7%	Yes	Major Impact	Low Impact	Retain as per section 3	Significant deadwood
109	1	*Acacia decurrens*	16	4	200	Fair	Fair	Medium	2.4	1.7	Short (5-15 years)	Medium	0%	No	No Impact	No Impact		
110	1	*Acacia decurrens*	15	5	250	Fair	Fair	Medium	3.0	1.9	Short (5-15 years)	Medium	0%	No	No Impact	No Impact		
111	1	*Eucalyptus sp.*	16	6	550	Good	Good	High	6.6	2.6	Long (>40 years)	High	18.9%	No	Major Impact	Low Impact	Retain as per section 3	
112	1	*Eucalyptus sp.*	17	5	320	Good	Fair	High	3.8	2.1	Long (>40 years)	High	0%	No	No Impact	No Impact		
113	1	*Acacia longifolia*	13	5	200	Good	Fair	Medium	2.4	1.7	Short (5-15 years)	Medium	7.8%	No	Minor Impact	Low Impact	Retain as per section 3	
115	1	*Acacia decurrens*	14	8	300	Good	Good	Medium	3.6	2.0	Short (5-15 years)	Medium	73.8%	Yes	Major Impact	Low Impact	Retain as per section 3	
116	1	*Acacia decurrens*	10	6	220	Good	Good	Medium	2.6	1.8	Short (5-15 years)	Medium	0%	No	No Impact	No Impact		
117	1	*Eucalyptus sp.*	17	9	900	Good	Good	High	10.8	3.2	Long (>40 years)	High	0%	No	No Impact	No Impact		
118	1	*Eucalyptus sp.*	17	8	650	Good	Good	High	7.8	2.8	Long (>40 years)	High	0%	No	No Impact	No Impact		
119	5	*Acacia decurrens*	11	3	150	Fair	Fair	Medium	2.0	1.5	Short (5-15 years)	Medium	0%	No	No Impact	No Impact		Group of 5
120	1	*Acacia longifolia*	8	2	100	Good	Good	Medium	2.0	1.5	Short (5-15 years)	Medium	0%	No	No Impact	No Impact		

Tree	Trees in group	Botanical name	Height (m)	Spread (m)	DBH (mm)	Health	Structure	Landscape significance	TPZ (m)	SRZ (m)	ULE	Retention value	TPZ Encroachment (%)	SRZ Impact	Calculated Impact	Proposed Impact	Notes on proposed impact	Notes on tree health
121	1	*Eucalyptus sp.*	22	15	1200	Good	Good	High	14.4	3.6	Long (>40 years)	High	0%	No	No Impact	No Impact		
122	1	*Eucalyptus sp.*	17	9	850	Good	Fair	High	10.2	3.1	Long (>40 years)	High	0%	No	No Impact	No Impact		Leaning
123	1	*Pinus radiata*	25	17	1800	Fair	Fair	High	15.0	4.2	Medium (15-40 years)	High	0%	No	No Impact	No Impact		
124	1	*Eucalyptus sp.*	24	13	1300	Good	Fair	High	15.0	3.7	Long (>40 years)	High	7.5%	No	Minor Impact	Low Impact	Retain as per section 3	
125	10	*Eucalyptus sp.*	10	3	100	Good	Good	Medium	2.0	1.5	Long (>40 years)	Medium	0%	No	No Impact	No Impact		Group of 10 Euc saplings
126	1	*Eucalyptus sp.*	16	12	1300	Fair	Fair	High	15.0	3.7	Long (>40 years)	High	0%	No	No Impact	No Impact		
127	1	*Acacia decurrens*	10	4	120	Fair	Fair	Medium	2.0	1.5	Short (5-15 years)	Medium	0%	No	No Impact	No Impact		
128	1	*Pinus radiata*	30	22	2000	Fair	Fair	High	15.0	4.4	Long (>40 years)	High	0%	No	No Impact	No Impact		
129	1	*Eucalyptus sp.*	17	10	650	Fair	Fair	High	7.8	2.8	Long (>40 years)	High	0%	No	No Impact	No Impact		
130	1	*Eucalyptus sp.*	17	15	1100	Good	Fair	High	13.2	3.4	Long (>40 years)	High	0%	No	No Impact	No Impact		Leaning
131	1	*Acacia decurrens*	10	3	150	Fair	Fair	Medium	2.0	1.5	Short (5-15 years)	Medium	0%	No	No Impact	No Impact		
132	1	*Eucalyptus sp.*	16	14	1790	Fair	Fair	High	15.0	4.2	Long (>40 years)	High	0%	No	No Impact	No Impact		

Tree	Trees in group	Botanical name	Height (m)	Spread (m)	DBH (mm)	Health	Structure	Landscape significance	TPZ (m)	SRZ (m)	ULE	Retention value	TPZ Encroachment (%)	SRZ Impact	Calculated Impact	Proposed Impact	Notes on proposed impact	Notes on tree health
133	1	*Eucalyptus sp.*	10	9	850	Poor	Poor	Medium	10.2	3.1	Short (5-15 years)	Medium	0%	No	No Impact	No Impact		
134	1	*Eucalyptus fibrosa*	22	13	1000	Good	Good	High	12.0	3.3	Long (>40 years)	High	0%	No	No Impact	No Impact		Large burl @ 1metre
135	1	*Eucalyptus sp.*	19	9	650	Good	Fair	High	7.8	2.8	Long (>40 years)	High	0%	No	No Impact	No Impact		Leaning
136	1	*Acacia decurrens*	10	6	150	Good	Fair	Medium	2.0	1.5	Short (5-15 years)	Medium	0%	No	No Impact	No Impact		
137	1	*Eucalyptus sp.*	7	4	150	Fair	Fair	Medium	2.0	1.5	Long (>40 years)	Medium	0%	No	No Impact	No Impact		
138	1	*Eucalyptus sp.*	20	13	1400	Good	Good	High	15.0	3.8	Long (>40 years)	High	0%	No	No Impact	No Impact		co dominant stems
139	1	*Eucalyptus sp.*	14	7	100	Fair	Poor	Medium	2.0	1.5	Medium (15-40 years)	Medium	0%	No	No Impact	No Impact		loss of main trunk at 4 metres
140	1	*Eucalyptus sp.*	17	10	1100	Fair	Poor	Medium	13.2	3.4	Medium (15-40 years)	Medium	0%	No	No Impact	No Impact		hollow through main trunk
141	1	*Acacia decurrens*	13	8	300	Fair	Fair	Medium	3.6	2.0	Short (5-15 years)	Medium	0%	No	No Impact	No Impact		
142	10	*Eucalyptus sp.*	7	2	100	Good	Good	Medium	2.0	1.5	Long (>40 years)	High	0%	No	No Impact	No Impact		Group of 10 saplings
143	1	*Acacia decurrens*	5	5	200	Fair	Fair	Medium	2.4	1.7	Short (5-15 years)	Medium	0%	No	No Impact	No Impact		
144	1	*Acacia decurrens*	11	5	150	Fair	Fair	Medium	2.0	1.5	Short (5-15 years)	Medium	0%	No	No Impact	No Impact		

Tree	Trees in group	Botanical name	Height (m)	Spread (m)	DBH (mm)	Health	Structure	Landscape significance	TPZ (m)	SRZ (m)	ULE	Retention value	TPZ Encroachment (%)	SRZ Impact	Calculated Impact	Proposed Impact	Notes on proposed impact	Notes on tree health
145	1	*Eucalyptus sp.*	17	15	1500	Good	Good	High	15.0	3.9	Long (>40 years)	High	0%	No	No Impact	No Impact		co dominant stems
146	1	*Eucalyptus sp*	4	4	100	Good	Fair	Medium	2.0	1.5	Long (>40 years)	High	0%	No	No Impact	No Impact		growing at base of 147
147	1	*Eucalyptus sp.*	13	6	1000	Good	Good	High	12.0	3.3	Long (>40 years)	High	0%	No	No Impact	No Impact		
148	1	*Acacia decurrens*	5	4	100	Fair	Fair	Medium	2.0	1.5	Short (5-15 years)	Medium	0%	No	No Impact	No Impact		wound at base
150	1	*Eucalyptus sp.*	16	7	550	Fair	Fair	High	6.6	2.6	Medium (15-40 years)	High	0%	No	No Impact	No Impact		co dominant stems
151	1	*Exocarpos sp.*	17	10	1700	Good	Fair	High	15.0	4.1	Long (>40 years)	High	6.9%	No	Minor Impact	Low Impact	Retain as per section 3	co dominant stems
152	2	*Acacia decurrens*	8	6	150	Fair	Fair	Medium	2.0	1.5	Short (5-15 years)	Medium	0%	No	No Impact	No Impact		group of 2
153	1	*Melaleuca sp.*	5	3	100	Good	Good	Medium	2.0	1.5	Long (>40 years)	High	0%	No	No Impact	No Impact		Multi trunked
154	1	*Eucalyptus sp.*	20	14	1500	Fair	Fair	High	15.0	3.9	Medium (15-40 years)	High	31.9%	No	Major Impact	Low Impact	Retain as per section 3	co dominant stems + basal decay
155	1	*Eucalyptus sp.*	9	4	250	Good	Good	Medium	3.0	1.9	Long (>40 years)	High	0%	No	No Impact	No Impact		young sapling
156	1	*Eucalyptus sp.*	8	4	250	Good	Good	Medium	3.0	1.9	Long (>40 years)	High	0%	No	No Impact	No Impact		young sapling
157	1	*Acacia decurrens*	9	3	200	Fair	Fair	Medium	2.4	1.7	Short (5-15 years)	Medium	0%	No	No Impact	No Impact		

Tree	Trees in group	Botanical name	Height (m)	Spread (m)	DBH (mm)	Health	Structure	Landscape significance	TPZ (m)	SRZ (m)	ULE	Retention value	TPZ Encroachment (%)	SRZ Impact	Calculated Impact	Proposed Impact	Notes on proposed impact	Notes on tree health
158	1	*Eucalyptus sp.*	14	7	900	Fair	Fair	Medium	10.8	3.2	Medium (15-40 years)	High	1.3%	No	Minor Impact	Low Impact		
160	1	*Eucalyptus sp.*	17	12	1600	Good	Fair	High	15.0	4.0	Long (>40 years)	High	34.9%	Yes	Major Impact	Low Impact	Retain as per section 3	co dominant stems
161	1	*Eucalyptus sp.*	21	14	1200	Good	Good	High	14.4	3.6	Long (>40 years)	High	2.7%	No	Minor Impact	Low Impact	Retain as per section 3	
162	1	*Acacia decurrens*	7	7	240	Fair	Fair	Medium	2.9	1.8	Short (5-15 years)	Medium	0%	No	No Impact	No Impact		
163	1	*Eucalyptus sp.*	26	11	2000	Good	Good	High	15.0	4.4	Medium (15-40 years)	High	3.3%	No	Minor Impact	Low Impact	Retain as per section 3	
165	6	*Acacia decurrens*	12	6	300	Fair	Fair	Medium	3.6	2.0	Short (5-15 years)	Medium	0%	No	No Impact	No Impact		Group of 6
166	1	*Eucalyptus sp.*	18	15	900	Good	Good	High	10.8	3.2	Long (>40 years)	High	0%	No	No Impact	No Impact		Multi trunked
167	1	*Callitris rhomboidea*	4	4	100	Good	Good	Medium	2.0	1.5	Medium (15-40 years)	High	0%	No	No Impact	No Impact		Multi trunked
168	1	*Callitris rhomboidea*	4	3	100	Good	Good	Medium	2.0	1.5	Medium (15-40 years)	High	0%	No	No Impact	No Impact		
169	1	*Acacia decurrens*	8	9	250	Good	Fair	Medium	3.0	1.9	Short (5-15 years)	Medium	0%	No	No Impact	No Impact		
170	1	*Acacia decurrens*	9	6	250	Fair	Fair	Medium	3.0	1.9	Short (5-15 years)	Medium	0%	No	No Impact	No Impact		some dead decurrens mixed with group of 10
171	5	*Acacia decurrens*	13	5	300	Fair	Fair	Medium	3.6	2.0	Short (5-15 years)	Medium	0%	No	No Impact	No Impact		Group of 5

Tree	Trees in group	Botanical name	Height (m)	Spread (m)	DBH (mm)	Health	Structure	Landscape significance	TPZ (m)	SRZ (m)	ULE	Retention value	TPZ Encroachment (%)	SRZ Impact	Calculated Impact	Proposed Impact	Notes on proposed impact	Notes on tree health
172	1	*Salix babylonica*	7	3	100	Fair	Fair	Low	2.0	1.5	Remove (<5 years)	Low	22.8%	Yes	Willow	Willow		twisted co dominant stems at base. compromised.
173	1	*Salix babylonica*	6	4	150	Fair	Fair	Low	2.0	1.5	Remove (<5 years)	Low	2.1%	No	Willow	Willow		woody weeds at base
174	1	*Acacia longifolia*	11	3	300	Fair	Fair	Low	3.6	2.0	Short (5-15 years)	Medium	0%	No	No Impact	No Impact		
175	1	*Salix babylonica*	16	16	100	Poor	Poor	Medium	2.0	1.5	Medium (15-40 years)	Medium	0%	No	Willow	Willow		visually significant + hanging branches reshooting in riverr
176	20	*Acacia decurrens*	8	3	150	Fair	Fair	Medium	2.0	1.5	Short (5-15 years)	Medium	23.1%	Yes	Major Impact	High Impact		Group of 20
177	1	*Eucalyptus sp.*	20	16	1600	Good	Good	High	15.0	4.0	Long (>40 years)	High	49%	Yes	Major Impact	High Impact		
178	1	*Eucalyptus sp.*	20	9	700	Good	Good	High	8.4	2.9	Long (>40 years)	High	28%	Yes	Major Impact	High Impact		
179	1	*Exocarpos sp.*	20	10	1200	Good	Fair	High	14.4	3.6	Long (>40 years)	High	14.7%	No	Major Impact	Medium Impact		
180	1	*Eucalyptus sp.*	10	5	220	Good	Good	High	2.6	1.8	Long (>40 years)	High	0%	No	No Impact	No Impact		
181	1	*Eucalyptus sp.*	10	4	220	Good	Fair	High	2.6	1.8	Long (>40 years)	High	0%	No	No Impact	No Impact		
182	1	*Eucalyptus sp.*	14	13	600	Fair	Fair	High	7.2	2.7	Long (>40 years)	High	0%	No	No Impact	No Impact		co dominant stems
183	1	*Cupressus sempervirens*	12	7	550	Good	Fair	High	6.6	2.6	Long (>40 years)	High	0%	No	No Impact	No Impact		

Tree	Trees in group	Botanical name	Height (m)	Spread (m)	DBH (mm)	Health	Structure	Landscape significance	TPZ (m)	SRZ (m)	ULE	Retention value	TPZ Encroachment (%)	SRZ Impact	Calculated Impact	Proposed Impact	Notes on proposed impact	Notes on tree health
184	1	*Acacia decurrens*	11	7	180	Good	Good	Medium	2.2	1.6	Short (5-15 years)	Medium	0%	No	No Impact	No Impact		
185	1	*Acacia decurrens*	15	8	300	Fair	Fair	Medium	3.6	2.0	Short (5-15 years)	Medium	0%	No	No Impact	No Impact		
186	1	*Salix alba*	14	10	500	Fair	Fair	Medium	6.0	2.5	Medium (15-40 years)	Medium	0%	No	Willow	Willow		Multi trunked
187	1	*Acacia decurrens*	11	15	600	Poor	Poor	Low	7.2	2.7	Remove (<5 years)	Low	0%	No	No Impact	No Impact		trunk splitat 4 metres
188	1	*Acacia decurrens*	15	8	450	Poor	Poor	Low	5.4	2.4	Remove (<5 years)	Low	0%	No	No Impact	No Impact		root ball lifteed + leaning
189	1	*Acacia decurrens*	6	4	100	Fair	Fair	Medium	2.0	1.5	Short (5-15 years)	Medium	0%	No	No Impact	No Impact		
190	1	*Acacia decurrens*	15	7	400	Poor	Poor	Low	4.8	2.3	Remove (<5 years)	Low	0%	No	No Impact	No Impact		leaning and supressing trees across river
191	1	*Acacia decurrens*	12	8	280	Fair	Fair	Medium	3.4	1.9	Short (5-15 years)	Medium	0%	No	No Impact	No Impact		
192	1	*Acacia decurrens*	14	9	300	Good	Good	Medium	3.6	2.0	Short (5-15 years)	Medium	0%	No	No Impact	No Impact		
193	1	*Salix babylonica*	11	6	300	Poor	Poor	Medium	3.6	2.0	Medium (15-40 years)	Medium	0%	No	Willow	Willow		Significant deadwood
194	1	*Acacia decurrens*	17	7	400	Fair	Fair	Medium	4.8	2.3	Short (5-15 years)	Medium	0%	No	No Impact	No Impact		
195	1	*Salix alba*	14	7	350	Poor	Poor	Low	4.2	2.1	Remove (<5 years)	Low	0%	No	Willow	Willow		deadwood, unhealthy specimen, basal rot

Tree	Trees in group	Botanical name	Height (m)	Spread (m)	DBH (mm)	Health	Structure	Landscape significance	TPZ (m)	SRZ (m)	ULE	Retention value	TPZ Encroachment (%)	SRZ Impact	Calculated Impact	Proposed Impact	Notes on proposed impact	Notes on tree health
196	1	*Acacia decurrens*	10	6	150	Fair	Fair	Medium	2.0	1.5	Short (5-15 years)	Medium	0%	No	No Impact	No Impact		
197	1	*Acacia decurrens*	16	3	300	Poor	Poor	Low	3.6	2.0	Remove (<5 years)	Low	0%	No	No Impact	No Impact		leaning + roots exposed
198	1	*Acacia decurrens*	7	6	150	Poor	Fair	Low	2.0	1.5	Remove (<5 years)	Low	0%	No	No Impact	No Impact		
199	1	*Salix babylonica*	24	18	1650	Good	Good	High	15.0	4.1	Medium (15-40 years)	High	0%	No	Willow	Willow		Multi trunked
200	1	*Salix babylonica*	17	10	350	Fair	Fair	Medium	4.2	2.1	Medium (15-40 years)	Medium	0%	No	Willow	Willow		Significant deadwood
201	1	*Salix babylonica*	17	13	600	Fair	Fair	Medium	7.2	2.7	Medium (15-40 years)	Medium	0%	No	Willow	Willow		deadwood + root plate exposed
202	1	*Salix babylonica*	16	6	350	Poor	Poor	Low	4.2	2.1	Remove (<5 years)	Low	0%	No	Willow	Willow		sparse canopy
203	1	*Salix babylonica*	21	18	900	Good	Good	High	10.8	3.2	Medium (15-40 years)	High	2.9%	No	Willow	Willow		Multi trunked
204	1	*Acacia decurrens*	18	14	600	Good	Fair	Medium	7.2	2.7	Short (5-15 years)	Medium	2.7%	No	Minor Impact	Low Impact		Leaning
205	1	*Salix babylonica*	17	15	850	Good	Good	Medium	10.2	3.1	Medium (15-40 years)	High	3.3%	Yes	Willow	Willow		
206	1	*Salix babylonica*	13	11	650	Fair	Fair	High	7.8	2.8	Medium (15-40 years)	High	0%	No	Willow	Willow		Multi trunked
207	1	*Acacia longifolia*	9	9	300	Fair	Fair	Medium	3.6	2.0	Short (5-15 years)	Medium	0%	No	No Impact	No Impact		Leaning

Tree	Trees in group	Botanical name	Height (m)	Spread (m)	DBH (mm)	Health	Structure	Landscape significance	TPZ (m)	SRZ (m)	ULE	Retention value	TPZ Encroachment (%)	SRZ Impact	Calculated Impact	Proposed Impact	Notes on proposed impact	Notes on tree health
208	1	*Acacia longifolia*	8	3	200	Poor	Poor	Low	2.4	1.7	Remove (<5 years)	Low	0%	No	No Impact	No Impact		
209	1	*Acacia decurrens*	8	8	200	Fair	Fair	Low	2.4	1.7	Remove (<5 years)	Low	0%	No	No Impact	No Impact		
210	1	*Salix babylonica*	15	16	600	Good	Good	High	7.2	2.7	Medium (15-40 years)	High	0%	No	Willow	Willow		Multiple trunks
211	1	*Acacia decurrens*	16	6	300	Fair	Fair	Medium	3.6	2.0	Short (5-15 years)	Medium	0%	No	No Impact	No Impact		
212	1	*Acacia decurrens*	15	7	450	Fair	Fair	Medium	5.4	2.4	Short (5-15 years)	Medium	0%	No	No Impact	No Impact		Leaning
213	1	*Salix babylonica*	12	10	400	Good	Fair	Medium	4.8	2.3	Medium (15-40 years)	High	0%	No	Willow	Willow		
214	1	*Salix babylonica*	15	10	700	Good	Good	High	8.4	2.9	Medium (15-40 years)	High	0%	No	Willow	Willow		Multi trunked
215	1	*Salix babylonica*	16	16	650	Good	Good	High	7.8	2.8	Medium (15-40 years)	High	0%	No	Willow	Willow		
216	1	*Acacia decurrens*	10	12	450	Fair	Poor	Low	5.4	2.4	Remove (<5 years)	Low	0%	No	No Impact	No Impact		Leaning
217	1	*Acacia decurrens*	7	5	200	Fair	Fair	Medium	2.4	1.7	Short (5-15 years)	Medium	0%	No	No Impact	No Impact		
218	1	*Salix babylonica*	16	16	700	Good	Good	High	8.4	2.9	Medium (15-40 years)	High	0%	No	Willow	Willow		
219	1	*Acacia decurrens*	7	6	220	Fair	Fair	Medium	2.6	1.8	Short (5-15 years)	Medium	0%	No	No Impact	No Impact		

Tree	Trees in group	Botanical name	Height (m)	Spread (m)	DBH (mm)	Health	Structure	Landscape significance	TPZ (m)	SRZ (m)	ULE	Retention value	TPZ Encroachment (%)	SRZ Impact	Calculated Impact	Proposed Impact	Notes on proposed impact	Notes on tree health
220	1	*Acacia decurrens*	11	4	150	Fair	Fair	Medium	2.0	1.5	Short (5-15 years)	Medium	0%	No	No Impact	No Impact		
221	1	*Salix babylonica*	14	9	450	Good	Good	High	5.4	2.4	Medium (15-40 years)	High	0%	No	Willow	Willow		
222	1	*Acacia decurrens*	6	2	100	Fair	Fair	Medium	2.0	1.5	Short (5-15 years)	Medium	0%	No	No Impact	No Impact		
223	1	*Acacia decurrens*	7	2	150	Fair	Fair	Medium	2.0	1.5	Short (5-15 years)	Medium	0%	No	No Impact	No Impact		
224	1	*Acacia decurrens*	12	3	250	Fair	Fair	Medium	3.0	1.9	Short (5-15 years)	Medium	0%	No	No Impact	No Impact		
225	1	*Acacia decurrens*	15	14	400	Fair	Fair	Medium	4.8	2.3	Short (5-15 years)	Medium	0%	No	No Impact	No Impact		
226	1	*Acacia decurrens*	11	7	300	Fair	Fair	Medium	3.6	2.0	Short (5-15 years)	Medium	0%	No	No Impact	No Impact		Leaning
227	1	*Salix babylonica*	12	11	500	Good	Good	High	6.0	2.5	Medium (15-40 years)	High	0%	No	Willow	Willow		
228	1	*Salix alba*	20	9	550	Good	Good	High	6.6	2.6	Medium (15-40 years)	High	0%	No	Willow	Willow		
229	1	*Cupressus macrocarpa*	20	11	1500	Good	Good	High	15.0	3.9	Long (>40 years)	High	0%	No	No Impact	No Impact		Multi trunked
230	1	*Cupressus macrocarpa*	18	12	900	Poor	Fair	High	10.8	3.2	Short (5-15 years)	High	0%	No	No Impact	No Impact		Multi trunked
231	1	*Cupressus macrocarpa*	20	8	1000	Fair	Fair	High	12.0	3.3	Medium (15-40 years)	High	0%	No	No Impact	No Impact		Multi trunked

Tree	Trees in group	Botanical name	Height (m)	Spread (m)	DBH (mm)	Health	Structure	Landscape significance	TPZ (m)	SRZ (m)	ULE	Retention value	TPZ Encroachment (%)	SRZ Impact	Calculated Impact	Proposed Impact	Notes on proposed impact	Notes on tree health
232	1	*Cupressus macrocarpa*	20	8	1200	Poor	Fair	Medium	14.4	3.6	Short (5-15 years)	High	0%	No	No Impact	No Impact		Multi trunked
233	1	*Cupressus macrocarpa*	20	9	700	Poor	Fair	Medium	8.4	2.9	Short (5-15 years)	High	0%	No	No Impact	No Impact		Multi trunked
234	1	*Cupressus macrocarpa*	22	10	950	Fair	Fair	High	11.4	3.2	Medium (15-40 years)	High	0%	No	No Impact	No Impact		Multi trunked
235	1	*Cupressus macrocarpa*	22	5	600	Fair	Fair	High	7.2	2.7	Medium (15-40 years)	High	0%	No	No Impact	No Impact		
236	1	*Cupressus macrocarpa*	22	10	900	Good	Good	High	10.8	3.2	Long (>40 years)	High	0%	No	No Impact	No Impact		
237	1	*Cupressus macrocarpa*	22	10	1200	Good	Fair	High	14.4	3.6	Long (>40 years)	High	0%	No	No Impact	No Impact		Multi trunked
238	1	*Cupressus macrocarpa*	20	13	1000	Fair	Fair	High	12.0	3.3	Long (>40 years)	High	0%	No	No Impact	No Impact		Multi trunked
239	1	*Cupressus macrocarpa*	22	10	1400	Poor	Poor	High	15.0	3.8	Short (5-15 years)	High	0.8%	No	Minor Impact	Low Impact		
240	1	*Cupressus macrocarpa*	22	16	2000	Fair	Poor	High	15.0	4.4	Long (>40 years)	High	6.4%	No	Minor Impact	Low Impact		Multi trunked
241	1	*Cupressus macrocarpa*	25	15	2000	Fair	Poor	High	15.0	4.4	Long (>40 years)	High	3.2%	Yes	Major Impact	High Impact		Multi trunked
242	1	*Cupressus macrocarpa*	20	15	1300	Fair	Poor	High	15.0	3.7	Medium (15-40 years)	High	2.8%	No	Minor Impact	Low Impact		Multi trunked
243	1	*Cupressus macrocarpa*	22	7	400	Poor	Poor	High	4.8	2.3	Short (5-15 years)	High	0%	No	No Impact	No Impact		

Tree	Trees in group	Botanical name	Height (m)	Spread (m)	DBH (mm)	Health	Structure	Landscape significance	TPZ (m)	SRZ (m)	ULE	Retention value	TPZ Encroachment (%)	SRZ Impact	Calculated Impact	Proposed Impact	Notes on proposed impact	Notes on tree health
244	1	*Cupressus macrocarpa*	25	19	3000	Fair	Fair	High	15.0	5.3	Long (>40 years)	High	1.5%	No	Minor Impact	Low Impact		Multi trunked
245	1	*Cupressus macrocarpa*	18	15	2000	Fair	Fair	High	15.0	4.4	Medium (15-40 years)	High	0%	No	No Impact	No Impact		
246	1	*Cupressus macrocarpa*	22	15	1800	Good	Good	High	15.0	4.2	Long (>40 years)	High	0%	No	No Impact	No Impact		Multi trunked
247	1	*Cupressus macrocarpa*	22	15	1100	Fair	Fair	High	13.2	3.4	Medium (15-40 years)	High	0%	No	No Impact	No Impact		Multi trunked
248	1	*Cupressus macrocarpa*	22	15	1200	Fair	Fair	High	14.4	3.6	Medium (15-40 years)	High	0%	No	No Impact	No Impact		Multi trunked
249	1	*Cupressus macrocarpa*	25	22	4000	Good	Good	High	15.0	5.9	Long (>40 years)	High	0%	No	No Impact	No Impact		Multi trunked
250	1	*Cupressus macrocarpa*	12	6	750	Poor	Fair	High	9.0	2.9	Short (5-15 years)	High	0%	No	No Impact	No Impact		
251	1	*Cupressus macrocarpa*	24	15	2500	Good	Fair	High	15.0	4.9	Long (>40 years)	High	0%	No	No Impact	No Impact		Multi trunked
252	1	*Cupressus macrocarpa*	20	16	2500	Good	Fair	High	15.0	4.9	Long (>40 years)	High	0%	No	No Impact	No Impact		Multi trunked
253	1	*Cupressus macrocarpa*	20	13	1000	Poor	Poor	High	12.0	3.3	Short (5-15 years)	High	0%	No	No Impact	No Impact		Multi trunked
254	1	*Cupressus macrocarpa*	20	17	1500	Good	Fair	High	15.0	3.9	Long (>40 years)	High	1.1%	No	Minor Impact	Low Impact		multi trunked from base, 3 trunks @ approx 1500 dbh each

Tree	Trees in group	Botanical name	Height (m)	Spread (m)	DBH (mm)	Health	Structure	Landscape significance	TPZ (m)	SRZ (m)	ULE	Retention value	TPZ Encroachment (%)	SRZ Impact	Calculated Impact	Proposed Impact	Notes on proposed impact	Notes on tree health
255	1	*Cupressus macrocarpa*	22	17	2200	Good	Good	High	15.0	4.6	Long (>40 years)	High	7.4%	No	Minor Impact	Low Impact		Multi trunked
256	1	*Cupressus macrocarpa*	18	18	1100	Good	Fair	High	13.2	3.4	Long (>40 years)	High	5%	No	Minor Impact	Low Impact		Multi trunked. Raise rootball
257	1	*Cupressus macrocarpa*	22	7	650	Fair	Fair	High	7.8	2.8	Long (>40 years)	High	0%	No	No Impact	No Impact		Leaning
258	1	*Cupressus macrocarpa*	16	7	550	Fair	Fair	High	6.6	2.6	Medium (15-40 years)	High	0%	No	No Impact	No Impact		Multi trunked
259	1	*Cupressus macrocarpa*	18	7	600	Fair	Fair	High	7.2	2.7	Medium (15-40 years)	High	0%	No	No Impact	No Impact		Multi trunked
260	1	*Ulmus sp.*	12	9	400	Fair	Fair	Medium	4.8	2.3	Medium (15-40 years)	Medium	0%	No	No Impact	No Impact		Leaning
261	1	*Cupressus macrocarpa*	20	13	1400	Fair	Fair	High	15.0	3.8	Medium (15-40 years)	High	0%	No	No Impact	No Impact		Leaning
262	1	*Cupressus macrocarpa*	20	6	800	Fair	Fair	High	9.6	3.0	Medium (15-40 years)	High	0%	No	No Impact	No Impact		
263	1	*Cupressus macrocarpa*	19	16	600	Fair	Fair	High	7.2	2.7	Medium (15-40 years)	High	0%	No	No Impact	No Impact		Multi trunked
264	1	*Cupressus macrocarpa*	17	1	200	Poor	Poor	Low	2.4	1.7	Remove (<5 years)	Low	0%	No	No Impact	No Impact		
265	1	*Cupressus macrocarpa*	22	10	1300	Good	Good	High	15.0	3.7	Long (>40 years)	High	16.7%	No	Major Impact	Medium Impact		Multi trunked
266	1	*Cupressus macrocarpa*	22	10	1000	Good	Fair	High	12.0	3.3	Medium (15-40 years)	High	17.1%	No	Major Impact	Medium Impact		Multi trunked

Tree	Trees in group	Botanical name	Height (m)	Spread (m)	DBH (mm)	Health	Structure	Landscape significance	TPZ (m)	SRZ (m)	ULE	Retention value	TPZ Encroachment (%)	SRZ Impact	Calculated Impact	Proposed Impact	Notes on proposed impact	Notes on tree health
267	1	*Cupressus macrocarpa*	17	11	1500	Good	Fair	High	15.0	3.9	Medium (15-40 years)	High	20.7%	No	Major Impact	High Impact		Multi trunked
268	1	*Cupressus macrocarpa*	16	5	700	Poor	Fair	Medium	8.4	2.9	Short (5-15 years)	Medium	8.4%	No	Minor Impact	Low Impact		
270	1	*Cupressus macrocarpa*	20	15	1500	Fair	Fair	High	15.0	3.9	Medium (15-40 years)	High	13.6%	No	Major Impact	Medium Impact		Multiple trunks
271	1	*Cupressus macrocarpa*	18	10	550	Poor	Poor	High	6.6	2.6	Short (5-15 years)	High	0%	No	No Impact	No Impact		Multi trunked
272	1	*Cupressus macrocarpa*	19	13	1500	Good	Good	High	15.0	3.9	Long (>40 years)	High	9.6%	No	Minor Impact	Low Impact		Multi trunked
273	1	*Acacia decurrens*	7	5	100	Fair	Fair	Medium	2.0	1.5	Short (5-15 years)	Medium	0%	No	No Impact	No Impact		
274	1	*Acacia decurrens*	6	5	150	Good	Good	Medium	2.0	1.5	Short (5-15 years)	Medium	0%	No	No Impact	No Impact		
276	1	*Acacia decurrens*	11	9	400	Poor	Poor	Low	4.8	2.3	Remove (<5 years)	Low	0%	No	No Impact	No Impact		
277A	1	*Cupressus sempervirens*	12	6	500	Good	Good	High	6.0	2.5	Long (>40 years)	High	0%	No	No Impact	No Impact		
277B	1	*Cupressus sempervirens*	12	6	500	Good	Good	High	6.0	2.5	Long (>40 years)	High	0%	No	No Impact	No Impact		
277C	1	*Cupressus sempervirens*	12	6	500	Good	Good	High	6.0	2.5	Long (>40 years)	High	0%	No	No Impact	No Impact		
277D	1	*Cupressus sempervirens*	12	6	500	Good	Good	High	6.0	2.5	Long (>40 years)	High	0%	No	No Impact	No Impact		

Tree	Trees in group	Botanical name	Height (m)	Spread (m)	DBH (mm)	Health	Structure	Landscape significance	TPZ (m)	SRZ (m)	ULE	Retention value	TPZ Encroachment (%)	SRZ Impact	Calculated Impact	Proposed Impact	Notes on proposed impact	Notes on tree health
277E	1	*Cupressus sempervirens*	12	6	500	Good	Good	High	6.0	2.5	Long (>40 years)	High	0%	No	No Impact	No Impact		
277F	1	*Cupressus sempervirens*	12	6	500	Good	Good	High	6.0	2.5	Long (>40 years)	High	0%	No	No Impact	No Impact		
277G	1	*Cupressus sempervirens*	12	6	500	Good	Good	High	6.0	2.5	Long (>40 years)	High	0%	No	No Impact	No Impact		
277H	1	*Cupressus sempervirens*	12	6	500	Good	Good	High	6.0	2.5	Long (>40 years)	High	0%	No	No Impact	No Impact		
277I	1	*Cupressus sempervirens*	12	6	500	Good	Good	High	6.0	2.5	Long (>40 years)	High	0%	No	No Impact	No Impact		
277J	1	*Cupressus sempervirens*	12	6	500	Good	Good	High	6.0	2.5	Long (>40 years)	High	0%	No	No Impact	No Impact		
278A	1	*Cupressus sempervirens*	10	5	400	Good	Good	High	4.8	2.3	Long (>40 years)	High	0%	No	No Impact	No Impact		
278B	1	*Cupressus sempervirens*	10	5	400	Good	Good	High	4.8	2.3	Long (>40 years)	High	0%	No	No Impact	No Impact		
278C	1	*Cupressus sempervirens*	10	5	400	Good	Good	High	4.8	2.3	Long (>40 years)	High	0%	No	No Impact	No Impact		
278D	1	*Cupressus sempervirens*	10	5	400	Good	Good	High	4.8	2.3	Long (>40 years)	High	0%	No	No Impact	No Impact		
278E	1	*Cupressus sempervirens*	10	5	400	Good	Good	High	4.8	2.3	Long (>40 years)	High	0%	No	No Impact	No Impact		
278F	1	*Cupressus sempervirens*	10	5	400	Good	Good	High	4.8	2.3	Long (>40 years)	High	0%	No	No Impact	No Impact		

Tree	Trees in group	Botanical name	Height (m)	Spread (m)	DBH (mm)	Health	Structure	Landscape significance	TPZ (m)	SRZ (m)	ULE	Retention value	TPZ Encroachment (%)	SRZ Impact	Calculated Impact	Proposed Impact	Notes on proposed impact	Notes on tree health
278G	1	*Cupressus sempervirens*	10	5	400	Good	Good	High	4.8	2.3	Long (>40 years)	High	0%	No	No Impact	No Impact		
278H	1	*Cupressus sempervirens*	10	5	400	Good	Good	High	4.8	2.3	Long (>40 years)	High	0%	No	No Impact	No Impact		
278I	1	*Cupressus sempervirens*	10	5	400	Good	Good	High	4.8	2.3	Long (>40 years)	High	0%	No	No Impact	No Impact		
278J	1	*Cupressus sempervirens*	10	5	400	Good	Good	High	4.8	2.3	Long (>40 years)	High	0%	No	No Impact	No Impact		
279A	1	*Cupressus sempervirens*	12	6	509	Good	Good	High	6.1	2.5	Long (>40 years)	High	0%	No	No Impact	No Impact		
279B	1	*Cupressus sempervirens*	12	6	509	Good	Good	High	6.1	2.5	Long (>40 years)	High	0%	No	No Impact	No Impact		
279C	1	*Cupressus sempervirens*	12	6	509	Good	Good	High	6.1	2.5	Long (>40 years)	High	0%	No	No Impact	No Impact		
279D	1	*Cupressus sempervirens*	12	6	509	Good	Good	High	6.1	2.5	Long (>40 years)	High	0%	No	No Impact	No Impact		
279E	1	*Cupressus sempervirens*	12	6	509	Good	Good	High	6.1	2.5	Long (>40 years)	High	0%	No	No Impact	No Impact		
279F	1	*Cupressus sempervirens*	12	6	509	Good	Good	High	6.1	2.5	Long (>40 years)	High	0%	No	No Impact	No Impact		
279G	1	*Cupressus sempervirens*	12	6	509	Good	Good	High	6.1	2.5	Long (>40 years)	High	0%	No	No Impact	No Impact		
279H	1	*Cupressus sempervirens*	12	6	509	Good	Good	High	6.1	2.5	Long (>40 years)	High	0%	No	No Impact	No Impact		

Tree	Trees in group	Botanical name	Height (m)	Spread (m)	DBH (mm)	Health	Structure	Landscape significance	TPZ (m)	SRZ (m)	ULE	Retention value	TPZ Encroachment (%)	SRZ Impact	Calculated Impact	Proposed Impact	Notes on proposed impact	Notes on tree health
279I	1	*Cupressus sempervirens*	12	6	509	Good	Good	High	6.1	2.5	Long (>40 years)	High	0%	No	No Impact	No Impact		
279J	1	*Cupressus sempervirens*	12	6	509	Good	Good	High	6.1	2.5	Long (>40 years)	High	0%	No	No Impact	No Impact		
280A	1	*Cupressus sempervirens*	10	6	450	Good	Good	High	5.4	2.4	Long (>40 years)	High	0%	No	No Impact	No Impact		
280B	1	*Cupressus sempervirens*	10	6	450	Good	Good	High	5.4	2.4	Long (>40 years)	High	0%	No	No Impact	No Impact		
280C	1	*Cupressus sempervirens*	10	6	450	Good	Good	High	5.4	2.4	Long (>40 years)	High	0%	No	No Impact	No Impact		
280D	1	*Cupressus sempervirens*	10	6	450	Good	Good	High	5.4	2.4	Long (>40 years)	High	0%	No	No Impact	No Impact		
280E	1	*Cupressus sempervirens*	10	6	450	Good	Good	High	5.4	2.4	Long (>40 years)	High	0%	No	No Impact	No Impact		
280F	1	*Cupressus sempervirens*	10	6	450	Good	Good	High	5.4	2.4	Long (>40 years)	High	0%	No	No Impact	No Impact		
280G	1	*Cupressus sempervirens*	10	6	450	Good	Good	High	5.4	2.4	Long (>40 years)	High	0%	No	No Impact	No Impact		
280H	1	*Cupressus sempervirens*	10	6	450	Good	Good	High	5.4	2.4	Long (>40 years)	High	0%	No	No Impact	No Impact		
280I	1	*Cupressus sempervirens*	10	6	450	Good	Good	High	5.4	2.4	Long (>40 years)	High	0%	No	No Impact	No Impact		
280J	1	*Cupressus sempervirens*	10	6	450	Good	Good	High	5.4	2.4	Long (>40 years)	High	0%	No	No Impact	No Impact		

Tree	Trees in group	Botanical name	Height (m)	Spread (m)	DBH (mm)	Health	Structure	Landscape significance	TPZ (m)	SRZ (m)	ULE	Retention value	TPZ Encroachment (%)	SRZ Impact	Calculated Impact	Proposed Impact	Notes on proposed impact	Notes on tree health
281	1	*Acacia decurrens*	10	9	300	Good	Good	Medium	3.6	2.0	Short (5-15 years)	Medium	0%	No	No Impact	No Impact		
282A	1	*Cupressus sempervirens*	10	6	450	Good	Good	High	5.4	2.4	Long (>40 years)	High	0%	No	No Impact	No Impact		
282B	1	*Cupressus sempervirens*	10	6	450	Good	Good	High	5.4	2.4	Long (>40 years)	High	0%	No	No Impact	No Impact		
282C	1	*Cupressus sempervirens*	10	6	450	Good	Good	High	5.4	2.4	Long (>40 years)	High	0%	No	No Impact	No Impact		
282D	1	*Cupressus sempervirens*	10	6	450	Good	Good	High	5.4	2.4	Long (>40 years)	High	4.5%	No	Minor Impact	Low Impact		
282E	1	*Cupressus sempervirens*	10	6	450	Good	Good	High	5.4	2.4	Long (>40 years)	High	27.4%	Yes	Major Impact	High Impact		
283	1	*Cupressus sempervirens*	12	7	500	Good	Good	High	6.0	2.5	Long (>40 years)	High	25.9%	Yes	Major Impact	High Impact		
284	1	*Eucalyptus sp.*	16	12	1400	Good	Fair	High	15.0	3.8	Medium (15-40 years)	High	8.2%	No	Minor Impact	Low Impact		large hollow on main trunk + leaning
285	1	*Eucalyptus sp.*	6	5	200	Good	Good	Medium	2.4	1.7	Long (>40 years)	High	57.6%	Yes	Major Impact	High Impact		
286	1	*Eucalyptus sp.*	7	6	200	Good	Good	Medium	2.4	1.7	Long (>40 years)	High	39.8%	Yes	Major Impact	High Impact		
287	1	*Eucalyptus sp.*	6	5	200	Good	Fair	Medium	2.4	1.7	Long (>40 years)	High	0%	No	No Impact	No Impact		2 stems, 1 with split/inclusion
288	1	*Eucalyptus sp.*	10	5	150	Good	Good	Medium	2.0	1.5	Long (>40 years)	High	0%	No	No Impact	No Impact		Multiple trunks

Tree	Trees in group	Botanical name	Height (m)	Spread (m)	DBH (mm)	Health	Structure	Landscape significance	TPZ (m)	SRZ (m)	ULE	Retention value	TPZ Encroachment (%)	SRZ Impact	Calculated Impact	Proposed Impact	Notes on proposed impact	Notes on tree health
289	1	*Eucalyptus sp.*	10	6	200	Good	Good	Medium	2.4	1.7	Long (>40 years)	High	18.1%	Yes	Major Impact	High Impact		Multiple trunks
290	1	*Eucalyptus sp.*	9	5	200	Good	Good	Medium	2.4	1.7	Long (>40 years)	High	24.3%	Yes	Major Impact	High Impact		co dominant stems
291	1	*Eucalyptus sp.*	9	6	200	Good	Good	Medium	2.4	1.7	Long (>40 years)	High	71.9%	Yes	Major Impact	High Impact		
292	1	*Eucalyptus sp.*	8	7	200	Good	Good	Medium	2.4	1.7	Long (>40 years)	High	0%	No	No Impact	No Impact		
293	1	*Eucalyptus sp.*	6	4	200	Good	Good	Medium	2.4	1.7	Long (>40 years)	High	0%	No	No Impact	No Impact		split at base
294	1	*Acacia decurrens*	9	11	250	Good	Fair	Medium	3.0	1.9	Short (5-15 years)	Medium	0%	No	No Impact	No Impact		
295	1	*Eucalyptus sp.*	9	5	200	Good	Fair	Medium	2.4	1.7	Long (>40 years)	High	100%	Yes	Major Impact	High Impact		
296	1	*Eucalyptus sp.*	10	6	200	Good	Good	Medium	2.4	1.7	Long (>40 years)	High	100%	Yes	Major Impact	High Impact		
297	1	*Cupressus sempervirens*	12	5	450	Good	Good	High	5.4	2.4	Long (>40 years)	High	3.6%	No	Minor Impact	Low Impact		
298	1	*Eucalyptus sp.*	30	22	1800	Good	Good	High	15.0	4.2	Long (>40 years)	High	23.5%	No	Major Impact	High Impact		significant tree
299	1	*Eucalyptus sp.*	50	28	2000	Good	Good	High	15.0	4.4	Long (>40 years)	High	38.9%	Yes	Major Impact	High Impact		significant tree
300	1	*Eucalyptus sp.*	40	25	1600	Good	Good	High	15.0	4.0	Long (>40 years)	High	58.1%	Yes	Major Impact	High Impact		Significant tree

Tree	Trees in group	Botanical name	Height (m)	Spread (m)	DBH (mm)	Health	Structure	Landscape significance	TPZ (m)	SRZ (m)	ULE	Retention value	TPZ Encroachment (%)	SRZ Impact	Calculated Impact	Proposed Impact	Notes on proposed impact	Notes on tree health
301	1	*Eucalyptus sp.*	22	15	750	Good	Good	High	9.0	2.9	Long (>40 years)	High	12.2%	No	Major Impact	Medium Impact		Significant tree
302	1	*Eucalyptus oreades*	50	22	2800	Good	Good	High	15.0	5.1	Long (>40 years)	High	15.7%	No	Major Impact	Medium Impact		Sugnificant tree, co dominant stems
303	1	*Acacia decurrens*	10	10	250	Good	Fair	Medium	3.0	1.9	Short (5-15 years)	Medium	0%	No	No Impact	No Impact		
304	1	*Eucalyptus sp.*	10	4	200	Good	Good	Medium	2.4	1.7	Long (>40 years)	High	13.9%	Yes	Major Impact	High Impact		
305	1	*Acacia decurrens*	7	7	100	Fair	Fair	Medium	2.0	1.5	Short (5-15 years)	Medium	0%	No	No Impact	No Impact		
306	1	*Eucalyptus sp.*	12	4	200	Good	Good	Medium	2.4	1.7	Long (>40 years)	High	0%	No	No Impact	No Impact		
307	1	*Eucalyptus sp.*	10	4	150	Good	Good	Medium	2.0	1.5	Long (>40 years)	High	0%	No	No Impact	No Impact		
308	1	*Cupressus sempervirens*	12	7	400	Good	Good	High	4.8	2.3	Long (>40 years)	High	20.2%	No	Major Impact	High Impact		
309	1	*Cupressus sempervirens*	13	8	500	Good	Good	High	6.0	2.5	Long (>40 years)	High	20.5%	No	Major Impact	High Impact		Multi trunked
310	1	*Acacia decurrens*	11	6	250	Fair	Fair	Medium	3.0	1.9	Short (5-15 years)	Medium	15%	Yes	Major Impact	High Impact		
311	1	*Acacia decurrens*	9	10	300	Good	Good	Medium	3.6	2.0	Short (5-15 years)	Medium	0%	No	No Impact	No Impact		
312	1	*Acacia decurrens*	10	9	300	Fair	Fair	Medium	3.6	2.0	Short (5-15 years)	Medium	0%	No	No Impact	No Impact		

Tree	Trees in group	Botanical name	Height (m)	Spread (m)	DBH (mm)	Health	Structure	Landscape significance	TPZ (m)	SRZ (m)	ULE	Retention value	TPZ Encroachment (%)	SRZ Impact	Calculated Impact	Proposed Impact	Notes on proposed impact	Notes on tree health
313	1	*Acacia decurrens*	9	7	300	Fair	Fair	Medium	3.6	2.0	Short (5-15 years)	Medium	0%	No	No Impact	No Impact		
314	1	*Acacia decurrens*	9	5	250	Fair	Fair	Medium	3.0	1.9	Short (5-15 years)	Medium	0%	No	No Impact	No Impact		
315	1	*Acacia decurrens*	10	5	250	Fair	Fair	Medium	3.0	1.9	Short (5-15 years)	Medium	0%	No	No Impact	No Impact		
316	1	*Acacia decurrens*	10	4	240	Fair	Fair	Medium	2.9	1.8	Short (5-15 years)	Medium	0%	No	No Impact	No Impact		

Appendix E Tree protection guidelines

The following tree protection guidelines must be implemented during the construction period if no tree-specific recommendations are detailed.

E1 Tree protection fencing

The TPZ is a restricted area delineated by protective fencing or the use of an existing structure (such as a wall or fence).

Trees that are to be retained must have protective fencing erected around the TPZ (or as specified in the body of the report) to protect and isolate it from the construction works. Fencing must comply with the Australian Standard, AS 4687-2007, Temporary fencing and hoardings.

Tree protection fencing must be installed prior to site establishment and remain intact until completion of works. Once erected, protective fencing must not be removed or altered without the approval of the project arborist.

If the protective fencing requires temporary removal, trunk, branch and ground protection must be installed and must comply with AS 4970-2009, Protection of Trees on Development Sites.

Tree protection fencing shall be:

- Enclosed to the full extent of the TPZ (or as specified in the Recommendations and Tree Protection Plan).
- Cyclone chain wire link fence or similar, with lockable access gates.
- Certified and Inspected by the Project Arborist.
- Installed prior to any machinery or material are brought to site and before the commencement of works.
- Prominently sign posted with 300 mm x 450 mm boards stating, “NO ACCESS - TREE PROTECTION ZONE”.

E2 Crown protection

Tree crowns/canopy may be injured or damaged by machinery such as; excavators, drilling rigs, trucks, cranes, plant and vehicles. Where crown protection is required, it will usually be located at least one meter outside the perimeter of the crown.

Crown protection may include the installation of a physical barrier, pruning selected branches to establish clearance, or the tying/bracing of branches.

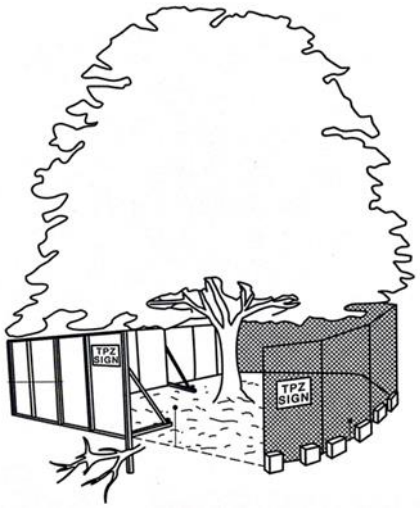
E3 Trunk protection

Where provision of tree protection fencing is impractical or must be temporarily removed, trunk protection shall be installed for the nominated trees to avoid accidental mechanical damage.

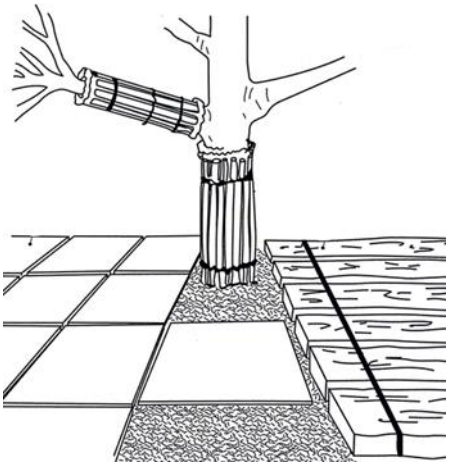
The removal of bark or branches allows the potential ingress of micro-organisms which may cause decay. Furthermore, the removal of bark restricts the trees' ability to distribute water, mineral ions (solutes), and glucose.

Trunk protection shall consist of a layer of either carpet underfelt, geotextile fabric or similar wrapped around the trunk, followed by 1.8 m lengths of softwood timbers aligned vertically and spaced evenly around the trunk (with an approx. 50 mm gap between the timbers).

The timbers must be secured using galvanised hoop strap (aluminium strapping). The timbers shall be wrapped around the trunk but not fixed to the tree, as this will cause injury/damage to the tree.



Tree protection fencing



Trunk protection fencing

E4 Ground protection

Tree roots are essential for the uptake/absorption of water, oxygen and mineral ions (solutes). It is essential to prevent the disturbance of the soil beneath the dripline and within the TPZ of trees that are to be retained. Soil compaction within the TPZ will adversely affect the ability of roots to function correctly.

If temporary access for machinery is required within the TPZ ground protection measures will be required. The purpose of ground protection is to prevent root damage and soil compaction within the TPZ. Maintain a thick layer of mulch around all retained trees to a depth of 100 mm using coarse pine bark or wood chip material that complies with AS 4454. Where the existing landscape within the TPZ is to remain unaltered (e.g. garden beds or turf) mulch may not be required.

For heavy vehicle access within TPZ, ground protection may include a permeable membrane such as geotextile fabric beneath a layer of crushed rock or rumble boards.

If the grade is to be raised within the TPZ, the material should be coarser or more porous than the underlying material.

E5 Root protection and investigation

If incursions/excavation within the TPZ are unavoidable, root investigation may be needed to determine the extent and location of roots within the area of construction activity. The location and distribution of roots are found through non-destructive excavation (NDE) methods such as hydro-vacuum excavation (sucker truck), air spade and manual excavation. Root investigation does not guarantee the retention of the tree.

If the project arborist identifies conflicting roots that requiring pruning, they must be pruned with a sharp implement such as; secateurs, pruners, handsaws or a chainsaw back to undamaged tissue. The final cut must be a clean cut.

E6 Underground services

All underground services should be routed outside of the TPZ. If underground services need to be installed within the TPZ, they should be installed using horizontal directional drilling (HDD), non-destructive excavation (NDE) methods such as hydro-vacuum, Air Spade or manually excavated trenches. The horizontal drilling/boring must be at minimum depth of 600 mm below grade. Trenching for services is to be regarded as “excavation”. The project arborist should assess the likely impacts of boring and bore pits on retained trees.

Appendix F Site plan

Figure 19: The Maltings site plan as provided by the client (Snohetta 2020)

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