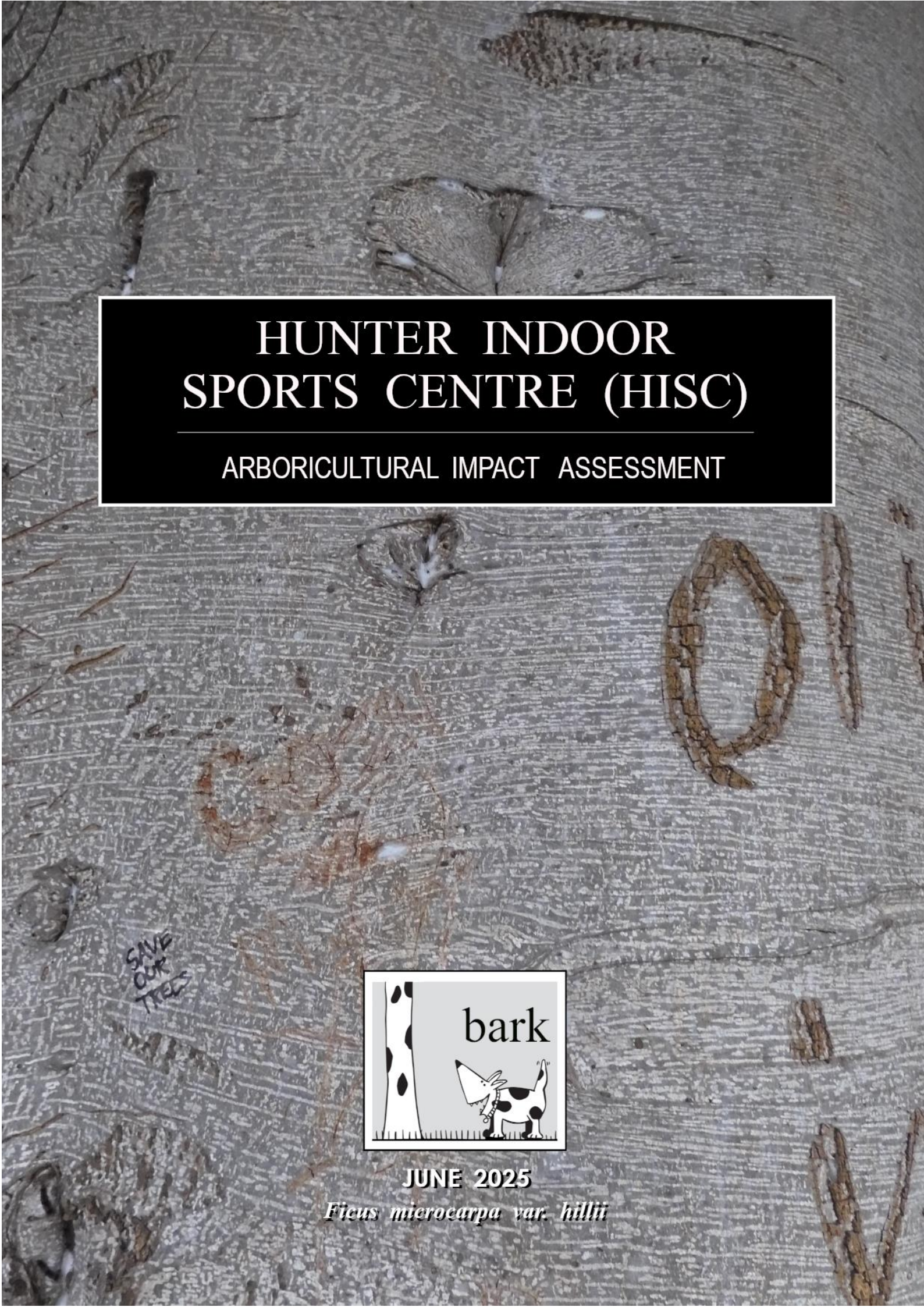
HUNTER INDOOR SPORTS CENTRE (HISC)

ARBORICULTURAL IMPACT ASSESSMENT



bark

JUNE 2025

Ficus microcarpa var. hillii

bark
trees
&
landscapes
ABN: 207 149 569 6
williams@bark.net.au

Arboricultural Impact Assessment

SITE & CLIENT	
Site Address:	2 Monash Road and 24 Wallarah Road, New Lambton
Client:	Basketball Association of Newcastle Limited (BANL)
C/-:	EJE Architecture (Attn: John Streeter/Phil Hendrie)
ADDRESS:	412 King Street, Newcastle, NSW,2300
EMAIL:	jstreeter@eje.com.au/phendrie@eje.com.au
JURISDICTION:	City of Newcastle (CoN)/Awabakal LALC

ASSESSING ARBORIST	
Company:	Bark. Trees & Landscapes
AQF5 Arborist:	Phillip Williams
Qualifications:	B.Sc.(Arch.), B.Land.Arch., Hort Cert., Dip.Hort.(Arboriculture - No. 6262394), QTRA Reg. No. 7712
Memberships	Institute of Australian Consulting Arborists (IACA), Australian Institute of Landscape Architects (AILA)
Phone:	+61 419 619 466
Email:	williams@bark.net.au

1. PROJECT OVERVIEW

Bark. Trees & Landscapes has been commissioned by Basketball Association of Newcastle Limited (BANL) to prepare an Arboricultural Impact Assessment (AIA) in accordance with the technical requirements of the Secretary's Environmental Assessment Requirements (SEARs), and in support of the State Significant Development Application (SSD-65595459) for the proposed Hunter Indoor Sports Centre with courts, indoor stadium, amenities and associated civil and landscaping works, at 2 Monash Road and 24 Wallarah Road, New Lambton.

The aim of the report is to determine what impact the proposed development may have on the existing vegetation and to provide advice on how best to ensure the trees can retained where appropriate.

The tree inspections were conducted from the ground applying Mattheck's and Breloer's Visual Tree Inspection (VTA) methodology recording relevant data to assist in determining the suitability of a tree's retention and to influence design outcomes for better tree retention. (Note: refer to Section 4 for a more complete description of the methodology used when assessing the trees.) The results contained within this report are based on observations made during site inspections carried out on 10th February, 16th – 17th February 2024 and reviewed on 18th, 20thand 24th May 2025.

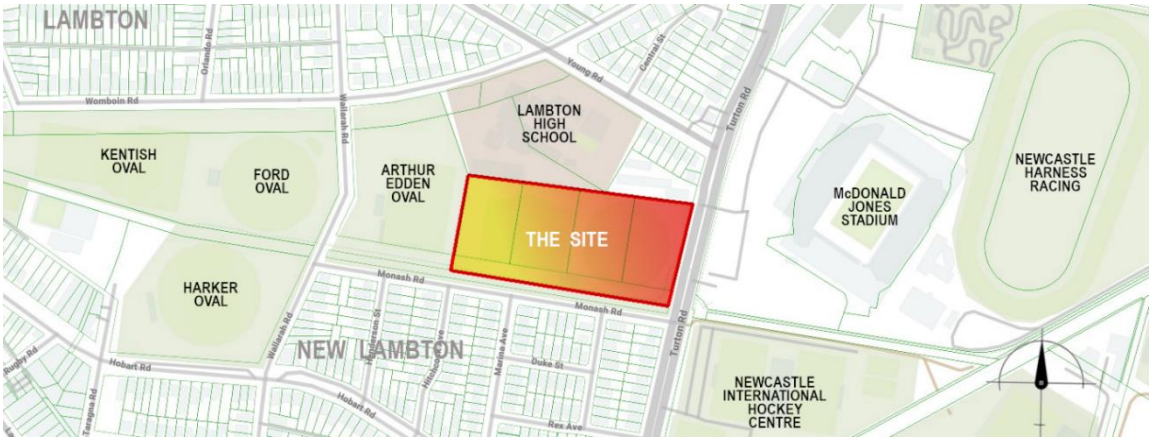


FIGURE 1: LOCATION PLAN
[Base Map Source https://meconemosaic.au/]

2. AMENDED ARBORICULTURAL IMACT ASSESMENT

This AIA supports the Response to Submissions (RTS) and Amendment Report for State Significant Development Application (SSD-65595459) for the proposed Hunter Indoor Sport Centre (HISC). SSD-65595459 sought development consent for an indoor stadium, amenities and associated civil and landscaping works.

The Amendment Report seeks changes to the original development proposal SSD-65595459. The key project amendments include moving the building footprint and carpark west, adding turfed open space near Turton Road, and shifting the access driveway south. The realigned pedestrian promenade within the carpark includes a bridge over the open space. (A more detailed description of the proposed development is given in Section 6.)

This AIA is an updated version of the report issued last May (Rev C, 2024/05/22) and takes into account changes to the design of the development requiring a re-assessment of the impact on existing trees on and near the site. Trees 20-24 have also been added to the trees requiring assessment as they had been omitted from the earlier survey. The revised design has resulted in revisions mainly to Sections 6-8, Appendix C and Appendix D of this report.

3. THE SITE

The site is comprised of 5 lots; Lot 2377 DP755247, Lot 2378 DP755247, Lot 2379 DP755247, Lot 2380 DP755247 and Lot 1 DP1304081, having a total site area of 3.77ha.

FIGURE 2: SITE AERIAL
[Base Image Source www.merconemosaic.com]

Pre-European settlement, the area would have comprised of Freshwater Wetlands with the vegetation being mainly *Eleocharis equisetina* (Australian Giant Hairgrass) growing in organically enriched fine-grain sediments. There would have also been a sparse emergent layer of trees such as *Casuarina glauca* (Swamp She-oak) and *Melaleuca spp.* (Swamp Paperbark and smaller species)[1]. At some stage the area was reclaimed eventually becoming the playing fields that currently exist. The area is commonly used for organised sports such as cricket and soccer with the adjoining Lambton High School using the Wallarah Ovals as additional playground. An amenities block is located towards the southern boundary along with three containers used to store equipment and tools.

The site is flat having a slight crossfall from west to east with a central crown shedding water to the outer edges. The current vegetation consists predominantly of maintained turf with cultural plantings occurring to the eastern and southern boundaries. Cultural plantings also occur within the northern, neighbouring properties.

[1] NSW Government, *Trees Near Me, www.treesnearme.app*

FIGURE 3: VIEW LOOKING EAST TO TURTON ROAD AND THE NEWCASTLE INTERNATIONAL SPORTS CENTRE

4. RELEVANT CONTROLS OR LEGISLATION

The site is located within the Local Government Area of Newcastle.

The site is zoned RE1 (Public Recreation) within the *Newcastle Local Environmental Plan 2012.* Relevant controls relating specifically to tree protection and tree management are addressed in the *Newcastle Development Control Plan* (NDCP) 2023 and in particular, the *Newcastle Urban Forest Technical Manual* (NUFTM) *2018, Part B Public Trees*.

The City of Newcastle has recognised the importance of the urban forest to the city's environment in its introduction to *Section C3 Vegetation Preservation and Care:*

> *Liveability greatly depends on the long-term conservation and management of existing tree, plants, shrubs, and other vegetation, and planting appropriate species.*[2]

The objectives of the NDCP in terms of vegetation preservation and management which are as follows:

1. *Manage and care for the urban forest and maximie urban greening, resulting in a healthy, green and biodiverse city that provides economic, ecological and social benefits.*
2. *Identify declared vehetation under the "Biodiversity and Conservation SEPP".*
3. *Provide opportunities for ecosystem pollinator habitat.*
4. *Prioritise the retention of the existing urban forest.*
5. *Ensure compensatory plantings atre provided when vegetation is cleared.*
6. *Protect and enhance the biodiversity and amenity value of the urban forest through the protection of trees, shrubs, and other vegetation including a diversity of native and non-native vegetation in both private, and along public verges, pathways, and roadways.*
7. *Protect high environmental value land, including biodiversty corridors, riparian areas and wetlands.*
8. *Authorise the clearing of priority weeds, and other inappropritae vegetation and encourage replacement with appropriate compensatory plantings.*[3]

It is Council's preference that public trees are retained and protected through appropriate design of development, and construction process.[4]

2 Page 2 of 16, *C3 Vegetation preservation and care*, NDCP (CoN, 2023)
3 Page 3 of 16, *idem.*
4 Page 1, *Newcastle Urban Forest Manual , 2018* – Part B Public Trees

5. METHODOLOGY

The following is a summary of the approach taken to assess the trees leading to the preparation of this report:

- Visual Tree Inspection (VTA), (Mattheck & Breloer, 1994) was undertaken. All trees were inspected and assessed from the ground. The VTA included all visible above ground parts of the tree including; exposed roots; trunk; branches; and, foliage.
- Diameter at breast height (DBH) and diameter at base–above the basal flare (DARB) measurements were taken and used to calculate the tree protection zones (TPZ) and structural root zones (SRZ) of each tree undertaken in accordance with AS 4970 -2009 *Protection of trees on development sites*.
- Tree structure was assessed by:
  - visual evidence of structural faults and/or potential points of failure;
  - poor pruning practices;
  - physical and/or storm damage;
  - supressed or distorted growth including trunk divergence and canopy asymmetery.
- Tree health was determined by:
  - canopy density, growth extension, foliage size (applicable to species) and colour;
  - presence of disease and/or pests;
  - termite activity;
  - the amount of deadwood and/or dieback within the crown and its location; and,
  - presence of epicormic growth.
- Life expectancy ratings were assessed using several factors such as: location; species; age; health; and, structure.

It should be noted that the following, more detailed assessment measures did not form part of the VTA inspection:

- No below ground inspections or analyses were undertaken within the root zone.
- No internal inspections or tissue analyses were undertaken on the subject trees.
- No aerial inspections were undertaken.

6. SUMMARY TREE ASSESSMENT

The trees have been assessed as two groups: those occurring on site and within Turton Road being managed by CoN (numeric, Trees 1-24) and those occurring off site and likely to be affected by the works (alphabetic, Trees A-G). Survey was used to locate the majority of trees (blue squares – Figure 4). Where trees had not been picked up by survey, they were located with the use of aerial imagery and by ground-truthing (pink squares-Figure 4). Access could only be arranged for Lambton High School and so estimates were made for trees growing on the unit site (303-305 Turton Road).

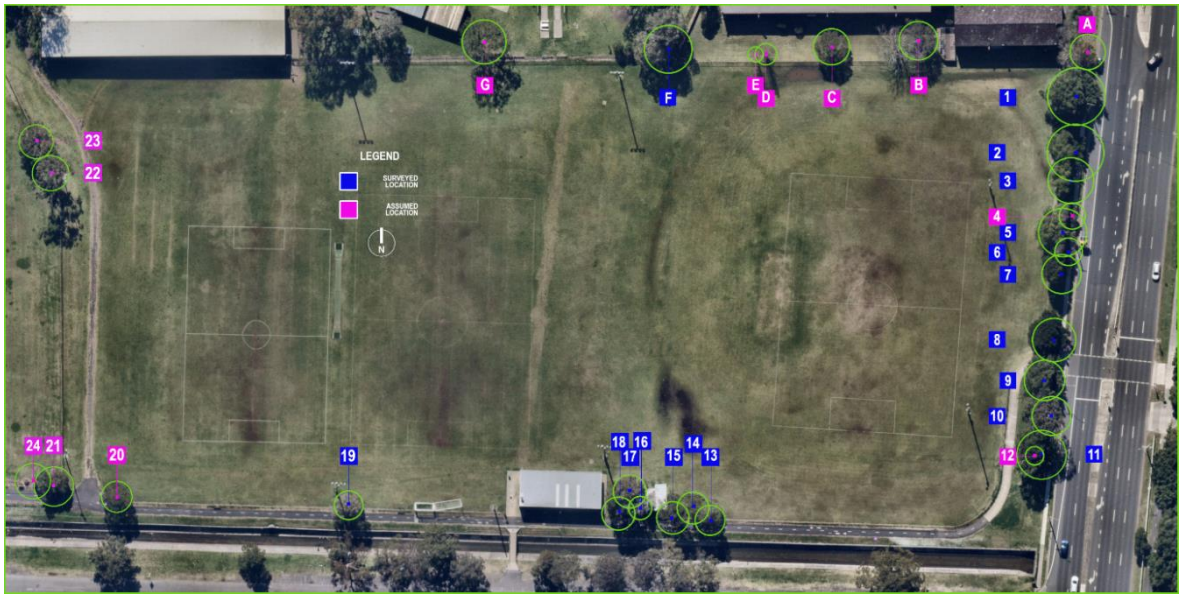


FIGURE 4: TREE LOCATIONS & NOTATION.
[BASE AERIAL: NEARMAP]

Trees 1-12 are located along the eastern boundary and running parallel to Turton Road. They are comprised mainly of *Ficus microcarpa var. hillii* (Hills Weeping Fig) growing within a formed garden beds that have come into disrepair. The timber edging used to form the garden bed on the western side has acted as a root deflector for the surface roots resulting in the early surface roots running north and south (Figure 5A). Deeper roots have spread beyond the timber edge and can be seen growing away from the trunk of the tree in a typical radial configuration. It is unlikely that the current root pattern, although not desirable, will result in pronounced instability for the figs as they develop in size. Most of the figs have included bark at branch junctions that on occasions can lead to failure as end weights become excessive. This is a typical characteristic of these figs if not specifically bred to avoid this tendency. In some instances, the roots of the trees have led the lifting of the nearby footpath resulting in some sections having to be repaired (Figure 5B). Most trees in this grouping have had to have their canopies trimmed to provide clearances to the powerlines occurring alongside Turton Road (Figure 5C) resulting in asymmetric canopies. All trees in this group (Trees 1-12) except for Trees 4 and 6, are good specimens.

FIGURE 5: TREES 1-12 – COMMON PROBLEMS

Trees 13-21 and 24 occur along the southern boundary as a group of 6 and as single trees. Trees 22 and 23 occur close to the western boundary. Trees 21-24 occur with in the fence that controls accces to Arthur Edden Oval. Tree species are either *Casuarina glauca* (Swamp She-oak) or *Melaleuca quiquenervia* (Swamp Paperbark) with the exception of Trees 21 and 24 that are *Casuarina cunninghamiana* and *Lophostemon confertus* respectively. All trees, with the exception of Tree 16, are in good condition. Tree 16 is in decline and consideration should be given to its removal and replacement although not critical at this stage. Trees 13 and 19 are located close to the fenceline and are causing damage to the fence (Figure 6A). Consideration should be given to removing the affected fencing panels to prevent possible damage to the trees and allow future growth to be unimpeded. Trees 21 and

FIGURE 6: TREES 13, F& G

Trees A – F are without significant problems that would justify their removal due to likely risks. All are suitable for retention.

7. PROPOSED DEVELOPMENT

The proposal is seeking to create a multi-use indoor sports facility concentrating on the provision of 12 courts with complementary facilities including: entry foyer, change rooms; bathrooms; cafe; a retail tenancy; function rooms; training spaces; offices; and, corporate spaces. One of the courts is to be a show court with retractable grandstand seating for up to 2,500 spectators. It is proposed to construct the facility as a staged development with associated external car parking added progressively resulting in a total of 240 car spaces.

FIGURE 7: SITE PLAN & PERSPECTIVE OF THE PROPOSED DEVELOPMENT.
[SOURCE: EJE ARCHITECTURE]

8. IMPACT ASSESSMENT

Figure 8 (and Appendix C2) shows that Trees 1, 2, 16-21 and 24 will need to be removed based on the proposed design. Changes to the design has protected all but two trees growing within the verge of Turton Road. Trees 1 and 2 will be required to be removed to allow access into the site. Trees 21 and 24 will be significantly impacted by the construction of a rain garden needed as part of the site's stormwater strategy

Trees 3 – 15, 22 and 23 will not be impacted by the the proposed works as the NRZs of these trees will be subjected to minor encroachments only, if at all. The exception is Tree 17 that has an encroachment of 17% . This is regaded as moderate and acceptable for a tree of this species with average vigour. A pedestrian walkway runs between Trees 7 and 8. Based on the details available, there will be on a slight encroachment to thes two trees but monitoring during the detailed design phase and construction will be required.

Off-site Trees A, B, C, D, and E will also be retained as encroachments are within acceptable limits having regard to their locations, type of tree and condition. It should be noted that Tree D has an encroachment of 21% which is the upper tolerance for this species having average vigour. Soil levels around this tree are not being changed and so consideration has included the impact of the roadworks. Nevertheless routine monitoring will be required and so it has been designated as "Threatened" requiring monitoring by the Project Arborist during construction.

Trees F and G have been also assessed as being "Threatened". Although the enchroachments for these trees are with acceptable limits for a moderate NRZ encroachment according to AS 4970-2025, soil levels around these trees are not being changed and so consideration has included the impact of the roadworks including the provision of an elevated deck over the NRZ of Tree G. Tree G will also be impacted by the relocation of the sewer. It is considered that the type of encroachment and with proper management of the areas associated with the trees including implementing the the Preliminary Tree Protection Plan (Appendix D), it will be possible for these trees to be retained.

Tree 16 has also been noted as being "Removed". This tree is in severe decline and even if left undisturbed, it is likely to fail. By removing the existing containers and making changes nearby, it is likely that its decline will be hastened although not directly affected by the construction works. Changes to the design of the proposal, even if practical, would not prevent this tree from failing.

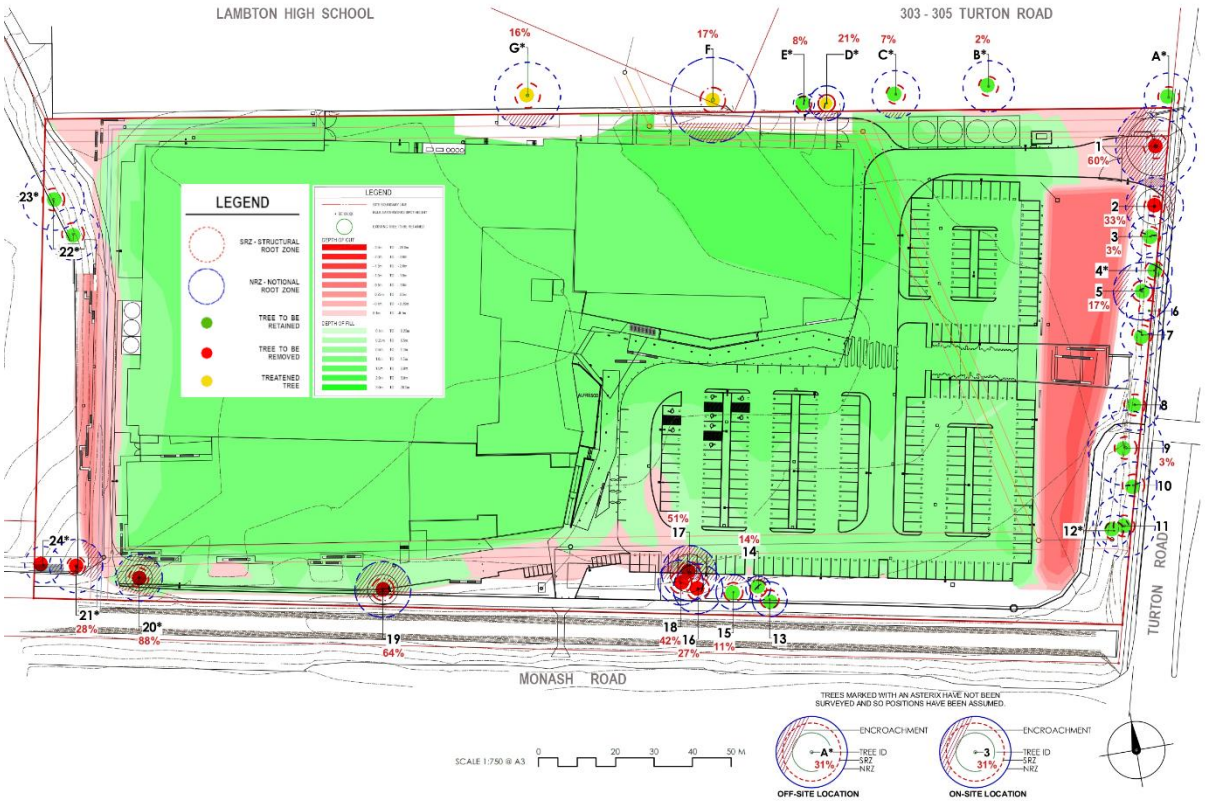


FIGURE 8: TREE IMPACT ASSESSMENT DIAGRAM.
[SOURCE: EJE ARCHITECTURE]

9. TREE RETENTION VALUES

The tree retention values were assessed for those trees noted for removal in accordance with The City of Newcastle's *Newcastle Urban Forest Technical Manual*, 2018. The results are given below applying the below assessment table:-

TREE RETENTION VALUES[5]

	LANDSCAPE SIGNIFICANCE READING						
TREE SUSTAINABILITY	1	2	3	4	5	6	7
Greater than 40 years	HIGH VALUE						
15 to 40 years			MODERATE VALUE				
5 to 15 years				LOW VALUE			
Less than 5 years					VERY LOW VALUE		
Dead or Hazardous							

ON-SITE TREES REQUIRED TO BE REMOVED – RETENTION VALUES

NO	BOTANICAL NAME	COMMON NAME	LIFE EXPECTANCY	CROWN[*6]	SIG RATING	RETENTION VALUE
16	*Casuarina glauca*	Swamp She-oak	<5yrs	<10m^2	5. Low	VERY LOW
17	*Melaleuca quinquenervia*	Swamp Paperbark	+40yrs	<50m^2	4. Moderate	MODERATE
18	*Casuarina cunninghamiana*	River She-oak	+40yrs	<50m^2	4. Moderate	MODERATE
19	*Melaleuca quinquenervia*	Swamp Paperbark	+40yrs	<50m^2	4. Moderate	MODERATE
20	*Casuarina cunninghamiana*	River She-oak	+40yrs	<50m^2	4. Moderate	MODERATE
21	*Callistemon salignus*	Willow Bottlebrush	15-40yrs	<30m^2	5. Low	LOW
24	*Lophostemon confertus*	Brush Box	15-40yrs	<15m^2	5. Low	LOW

All trees having a High or Moderate retention value are required to be replaced with compensatory planting at the rate as shown in the table below adapted from *Newcastle Urban Forest Technical Manual*[7].

A GUIDE TO COMPENSATORY PLANTING ON THE DEVELOPMENT SITE

	TOTAL AREA OF CROWN PROJECTION TO BE REMOVED	NUMBER OF STANDARD TREES[A] TO BE PLANTED
1	Up to 20m^2	1 Standard Tree
2	21m^2 – 40m^2	2 Standard Trees
3	41m^2 – 60m^2	3 Standard Trees
4	61m^2 – 80m^2	4 Standard Trees
5	81m^2– 100m^2	5 Standard Trees

A. A STANDARD TREE IS A MINIMUM 45L CONTAINER VOLUME, OR A MINIMUM CROWN PROJECTION AT MATURITY OF 20m^2 AND OF A DESIRABLE SPECIES

Based on the above, 12 standard trees need to planted on site as compensatory planting (for the removal of Trees 17, 18, 19 and 20) .

5 TABLE ADAPTED FROM NEWCASTLE CITY COUNCIL'S *NEWCASTLE URBAN FOREST TECHNICAL MANUAL*, 2018 – PAGE 18

6 CROWN PROJECTION AREAS HAVE BEEN USED TO DETERMINE LANDSCAPE SIGNIFICANCE AND COMPENSATORY PLANTING REQUIREMENTS USING AVAILABLE AERIAL IMAGERY (NSW MAP [WWW.AGIS.COM] – ACCESSED 2025/06).

7 NEWCASTLE CITY COUNCIL'S NEWCASTLE URBAN FOREST TECHNICAL MANUAL, 2018 - PAGE 19

10. RECOMMENDATIONS

Based on the above assessment, the following is recommended:

- that Trees 1, 2 occurring off-site, be removed, subject to negotiations with the City of Newcastle;
- that Trees 16-21 and 24, occurring on-site, be removed;
- that Trees 3-15, 22, 23, A-C and E be retained; and,
- that Trees D, F and G be retained by following the requirements of the Preliminary Tree Protection Manual (refer Appendix D) subject to careful detailing during the detailed design and documentation phases and further investigations occurring at the commencement of construction to ensure major roots are not damaged and/or further action taken.

Further, to compensate for the loss of Trees 1-18, trees of moderate retention value, it is recommended that 12 standard trees [45litre] be planted on the site.

Tree removal and compensatory planting can be addressed as conditions within the Notice of Determination as can the requirement that the Preliminary Tree Protection Plan described in Appendix D be developed and implemented.

11. REFERENCES

The City of Newcastle	*Newcastle Development Control Plan 2012*
The City of Newcastle	*Newcastle Urban Forest Technical Manual 2018*
Draper, D. & Richards, P.A.	*Dictionary for Managing Trees in Urban Environments*. CSIRO, Collingwood Vic, 2009
Link Tree System Ltd. (Barrell, J.)	*Arboricultural Journal* 1993, Vol. 17pp. 33-46, 01/03/98
Mattheck, C. & Breloer, H.	*The Body Language of Trees: A Handbook for Failure Analysis.* TSO, London, England, 1994
NSW Government	*NSW Map, https://www.argis.com*
NSW Government	*SEED,* https://www.seed.nsw.gov.au
NSW Government	*Trees Near Me,* https://www.treesnearme.app/explore
Safe Work Australia	*Guide to Managing Risks of Tree Trimming and Removal Work*, Australian Government, 2016
Standards Australia	*Australian Standard: AS 4970-2025 Protection of trees on development sites,* 2025
Standards Australia	*Australian Standard, AS 4373-2007 Pruning of amenity trees, 2007*

12. DISCLAIMER

This report has been prepared for the intended use by the client only.

All observations, recommendations and advice expressed within this report are based on the following:

- the requirements and practices contained within *AS 4970-2009 Protection of trees on development sites;*
- the training and professional experience of the consulting arborist;
- observations made at the time of inspection; and,
- information either supplied by the client, other consultants (where applicable) or supplementary research.

Trees are dynamically growing organisms that change over time. No guarantee is implied with respect to future tree condition or safety beyond the advice and recommendations made within the report. It is recommended that trees be inspected periodically, at least, annually and after major storm events.

13. APPENDICES

APPENDIX A: TREE IMAGES

The following images are intended to provide a record of the condition of the trees at the time of the inspection (2024/02/10, 2024/02/17, 2025/05/18, 20, 24 and to provide a frame of reference for future observations. Further details on each tree are provided in Appendix B.

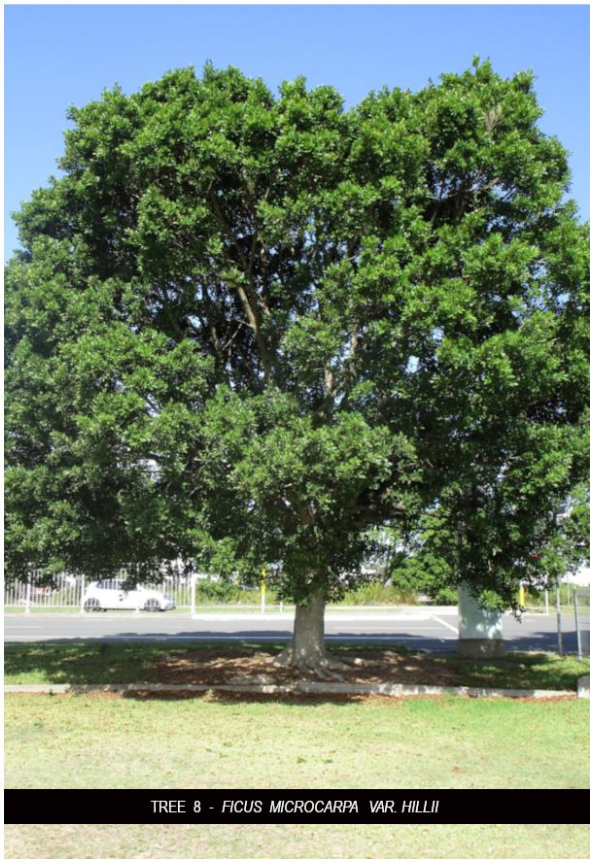
FIGURE A1: Trees 1-4 (INSPECTED 2024/02)

FIGURE A2: Trees 5-8 (INSPECTED 2024/02)

TREE 5 - *FICUS MICROCARPA VAR. HILLII*

TREE 6 - *MELALEUCA QUINQUENERVIA*

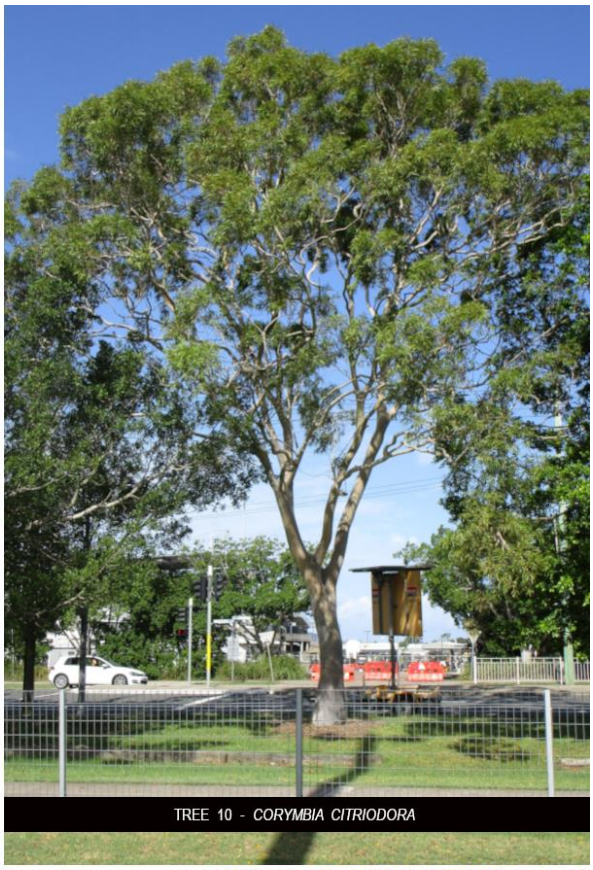
TREE 7 - *FICUS MICROCARPA VAR. HILLII*



TREE 8 - *FICUS MICROCARPA VAR. HILLII*

FIGURE A3: Trees 9-12 (INSPECTED 2024/02)

TREE 9 - *FICUS MICROCARPA VAR. HILLII*



TREE 10 - *CORYMBIA CITRIODORA*

TREE 11 - *FICUS MICROCARPA VAR. HILLII*

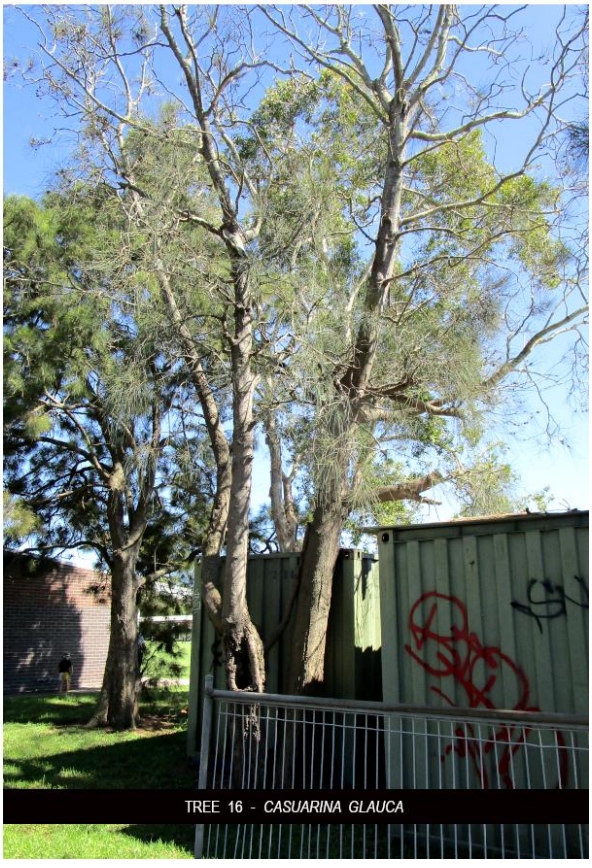
TREE 12 - *CALLISTEMON VIMINALIS*

FIGURE A4: Trees 13-16 **(INSPECTED 2024/02)**

TREE 13 - *CASUARINA CUNNINGHAMIANA*

TREE 14 - *CASUARINA CUNNINGHAMIANA*

TREE 15 - *CASUARINA CUNNINGHAMIANA*



TREE 16 - *CASUARINA GLAUCA*

FIGURE A5: Trees 17- 19, A-B (INSPECTED 2024/02)

TREES 17 & 18 - *M. QUINQUENERVIA / C. CUNNINGHAMIANA*


TREE 19 - *MELALEUCA QUINQUENERVIA*


TREE A - *LIQUIDAMBAR FORMOSANA*


TREE B - *CALLISTEMON VIMINALIS*

FIGURE A6: Trees C-F **(INSPECTED 2024/02)**

FIGURE A7: Tree 20 (INSPECTED 2025/05/20)

TREE 20 - *CASUARINA CUNNINGHAMIANA*

TREE 20 - *CASUARINA CUNNINGHAMIANA*

TREE 20 - *CASUARINA CUNNINGHAMIANA*

TREE 20 - CYCLEWAY DAMAGE

FIGURE A8: Tree 21 - 24 (INSPECTED 2025/05/24)

TREE 21 - *CALLISTEMON SALIGNA*

TREE 22 - *CORYMBIA CITRIODORA*

TREE 23 - *MELALEUCA QUINQUENERVIA*

TREE 24 - *LOPHOSTEMON CONFERTUS*

APPENDIX B: TREE ASSESSMENT TABLES

SUMMARY TREE ASSESSMENT TABLE: HUNTER INDOOR SPORTS CENTRE

No	BOTANICAL NAME	COMMON NAME	AGE CLASS	HEIGHT [M]	DBH[1] [MM]	TPZ [M]	DARB[2] [MM]	SRZ [M]	USEFUL LIFESPAN [YEARS]	STRUCTURE	VIGOUR	TREE AZ	IMAGE REF (APPX A)	COMMENTS
TREES OCCURRING ON COUNCIL CONTROLLED LAND														
1	*Ficus microcarpa var. hillii*	Hills Weeping Fig	M	15	880[1]	10.56	900	3.17	+40	AV	AV	A1	A1A	**1. [CoN TREE ID 67125]** [DBH:660/580] PAST PRUNING OF LOWER LIMBS. LARGE SURFACE ROOTS MANY RUNNING PARALLEL TO ROAD DUE TO THE PRESENCE OF TIMBER EDGING TO THE WEST AND FOOTPATH TO THE EAST. TREE ROOTS NOW RUNNING BEYOND EDGING AND INTO NEARBY TURF. BETTER GROWTH NOTED THAN ADJOINING TREES ASSUMED TO BE THE RESULT OF BETTER GROWING CONDITIONS AND ACCESS TO MOISTURE FROM NEARBY SWALE. LIFTING OF NEARBY FOOTPATH. INCLUDED BARK PRESENT BETWEEN CO-DOMINANT TRUNKS.**TO BE REMOVED. IMPACTED BY ENTRY ROAD**
2	*Ficus microcarpa var. hillii*	Hills Weeping Fig	M	10	630	7.56	600	2.67	+40	F	AV	A1	A1B	**2. [CoN TREE ID 67124]** TREE WITH CROWDED STRUCTURE WITH CROSSING BRANCHES. LARGE SURFACE ROOTS MANY RUNNING PARALLEL TO ROAD DUE TO THE PRESENCE OF TIMBER EDGING TO THE WEST AND FOOTPATH TO THE EAST. TREE ROOTS NOW RUNNING BEYOND EDGING AND INTO NEARBY TURF MINOR BARK INCLUSIONS PRESENT. LIFTING OF NEARBY FOOTPATH. SOOTY MOULD PRESENT TO THE FOLIAGE OF THE LOWER CANOPY. **TO BE REMOVED. IMPACTED BY ENTRY ROAD**
3	*Ficus microcarpa var. hillii*	Hills Weeping Fig	M	11	460	5.52	540	2.55	+40	AV	AV	A1	A1C	**3. [CoN TREE ID 67123]** LARGE SURFACE ROOTS MANY RUNNING PARALLEL TO ROAD DUE TO THE PRESENCE OF TIMBER EDGING TO THE WEST AND FOOTPATH TO THE EAST. TREE ROOTS NOW RUNNING BEYOND EDGING AND INTO NEARBY TURF. PRUNING TO ROADSIDE CANOPY RESULTING IN AN ASYMMETRIC CANOPY. SOOTY MOULD PRESENT TO THE FOLIAGE OF THE LOWER CANOPY. **TO BE RETAINED**
4	*Lophostemon confertus*	Brush Box	M	7.5	390[1]	4.68	480	2.43	15-40	P	AV	A1	A1D	**4. [CoN TREE ID 67122]** [DBH: 300/250] TREE PLANTED CLOSER TO POWERLINES. PRUNING TO ROADSIDE CANOPY RESULTING IN AN ASYMMETRIC CANOPY. EPICORMIC GROWTH PRESENT AT PRUNING SITES. SNAPPED FIRST ORDER BRANCH WITH BRANCH TEAR (OLD). **TO BE RETAINED**
5	*Ficus microcarpa var. hillii*	Hills Weeping Fig	M	13	630	7.56	630	2.73	+40	AV	AV	A1	A2A	**5. [CoN TREE ID 67121]** TREE WITH SLIGHT LEAN TO THE WEST. TREE DISLODGING EDGING. LARGE SURFACE ROOTS MANY RUNNING PARALLEL TO ROAD DUE TO THE PRESENCE OF TIMBER EDGING TO THE WEST AND FOOTPATH TO THE EAST. TREE ROOTS NOW RUNNING BEYOND EDGING AND INTO NEARBY TURF. **MODERATE ENCROACHMENT. TO BE RETAINED**
6	*Melaleuca quinquenervia*	Swamp Paperbark	M	14	500[1]	6.00	600	2.67	15-40	P	AV	A1	A2B	**6. [CoN TREE ID 67120]** [DBH: 240/440] EXTENSIVE PRUNING INCLUDING THE REMOVAL OF A ROADSIDE CO-DOMINANT TRUNK. PAST BORER ACTIVITY NOTED. PRUNING TO ROADSIDE CANOPY RESULTING IN AN ASYMMETRIC CANOPY. MODERATE CANOPY DENSITY. **TO BE RETAINED**
7	*Ficus microcarpa var. hillii*	Hills Weeping Fig	M	12	470	5.64	570	2.61	+40	AV	AV	A1	A2C	**7. [CoN TREE ID 67119]** TREE WITH UPRIGHT FORM PARTIALLY DUE TO REDUCTION OF CANOPY. ROOT GROWTH MODIFIED BY TIMBER EDGING BUT NOT AS MARKEDLY AS OTHER LOCATIONS. SOOTY MOULD PRESENT TO THE FOLIAGE OF THE LOWER CANOPY. **TO BE RETAINED**
8	*Ficus microcarpa var. hillii*	Hills Weeping Fig	M	10	560	6.72	650	2.76	+40	F	AV	A1	A2D	**8. [CoN TREE ID 67118]** TREE CONTAINS ONE NEST. GOOD, SPREADING CANOPY WITH SOMEWHAT CROWDED FORM. **TO BE RETAINED**
9	*Ficus microcarpa var. hillii*	Hills Weeping Fig	M	14	820	9.84	720	2.88	+40	AV	AV	A1	A3A	**9. [CoN TREE ID 67117]** TREE CONTAINS ONE NEST AND BRUSH-TAILED POSSUM. LARGE SURFACE ROOTS MANY RUNNING PARALLEL TO ROAD DUE TO THE PRESENCE OF TIMBER EDGING TO THE WEST AND FOOTPATH TO THE EAST. TREE ROOTS NOW RUNNING BEYOND EDGING AND INTO NEARBY TURF. PREVIOUS FOOTPATH DAMAGE AND REPAIRS NOTED. **MINOR ENCROACHMENT. TO BE RETAINED**
10	*Corymbia citriodora*	Lemon-scented Gum	M	17	510	6.12	720	2.88	+40	AV	AV	A1	A3B	**10. [CoN TREE ID 67116]** PAST PRUNING OF LOWER CANOPY WITH UPPER BRANCHES CLEAR OF WIRES. PRUNING TO ROADSIDE CANOPY RESULTING IN AN ASYMMETRIC CANOPY. **TO BE RETAINED**
11	*Ficus microcarpa var. hillii*	Hills Weeping Fig	M	14	680	8.16	650	2.76	+40	AV	AV	A1	A3C	**11. [CoN TREE ID 67115]** SEWER MANHOLE NOTED NEARBY INDICATING PRESENCE OF SEWER. MECHANICAL DAMAGE TO SURFACE ROOTS. PRUNING TO ROADSIDE CANOPY RESULTING IN AN ASYMMETRIC CANOPY. **TO BE RETAINED**
12	*Callistemon viminalis*	Weeping Bottlebrush	M	4	340	4.08	460	2.39	15-40	F	AV	A1	A3D	**12. [CoN TREE ID 67114]** [DBH: 160/300]] TREE OCCURRING CLOSE TO TREE 11 RESULTING IN SUPPRESSED GROWTH AND ASYMMETRIC CANOPY. BASE OF TREE BEING ENCIRCLED BY ROOTS FROM TREE 11. PREVOIUS PRUNING OF LOWER BRANCHES. SUCKER GROWTH PRESENT. **TO BE RETAINED**
13	*Casuarina cunninghamiana*	River She-oak	M	11	380	4.56	480	2.43	+40	F	F	A1	A4A	**13. [CoN TREE ID 67109]** TREE LOCATED ON FENCELINE RESULTING IN DISTORTION OF FENCE. LOWER BRANCHES REMOVED ESPECIALLY THOSE THAT WOULD HAVE IMPACTED ON SHARE PATH USERS. CO-DOMINANT TRUNK OCCURRING @ 1.7M AGL SLIGHT LEAN IN THE TRUNK FOM THE MIDDLE AND UPPER CANOPY. **TO BE RETAINED**
14	*Casuarina cunninghamiana*	River She-oak	M	9	270	3.24	370	2.18	15-40	F	F	A1	A4B	**14. [CON TREE ID 67108]** TREE WITH STORM DAMAGE AND LOST LIMBS RESULTING IN ELONGATED BRANCH STUBS. TRUNK WITH SLIGHT LEAN TO THE NORTH SELF-CORRECTING MID-HEIGHT. **MODERATE ENCROACHMENT. TO BE RETAINED**
15	*Casuarina cunninghamiana*	River She-oak	M	10	380	4.56	500	2.47	+40	AV	AV	A1	A4C	**15. [CoN TREE ID 67107]** [DBH: 250/290] STAR PICKET EMBEDDED INTO THE BASE OF THE TREE. OLD CAVITIES EXIST AT OLD PRUNING SITES. CO-DOMINANT TRUNG @ 750MM AGL. **MODERATE ENCROACHMENT. TO BE RETAINED.**
16	*Casuarina glauca*	Swamp She-oak	OM	15	540	6.48	770	2.97	<5	F	P	Z4	A4D	**16. [CoN TREE ID 67106]** [DBH: 370/400] OVER-MATURE TREE. SPARSE CANOPY (<5%). DEADWOOD IN CANOPY. LARGE CAVITY (OLD) WHERE BRANCH HAS BEEN LOST. ACAULESCENT CO-DOMINANT TRUNKS. SHIPPING CONTAINER PLACED NEAR TREE COVERING A PORTION OF ITS ROOT PLATE. BRANCHES OVERHANGING CONTAINER, REMOVED. **THIS TREE WILL NEED TO BE REMOVED.**

1. MULTI-TRUNKED TREES HAVE AN AVERAGE MEASUREMENT CALCULATED IN ACCORDANCE WITH AS 4970. 2. DARB = DIAMETER AT ROOT BUTTRESS USED WHEN CALCULATING SRZ. * ASSUMED AS PROPERTY NOT ACCESSED

LEGEND								
AGE CLASS	**Y**	**YOUNG** SAPLING/HAS NOT REACHED 1ST ADULT FORM	**SM**	**SEMI-MATURE** DBH < 300mm/APPROACHING FULL HEIGHT	**M**	**MATURE** DBH BET. 300 -700/APPROACH. MAX HT & SPREAD	**OM**	**OVER-MATURE/SENESCENT** LGE DBH, LGE BRANCH FAILURES/STRUCT FAULTS
STRUCTURE	**P**	**POOR** NUMEROUS STRUCTURAL FAULTS/HIGH RISK OF SEVERE FAILURE	**F**	**FAIR** STRUCTURAL FAULTS PRESENT /MODERATE RISK OF SEVERE FAILURE	**AV**	**AVERAGE** SOME MINOR FAULTS /MODERATE RISK FOR MAJOR FAILURE	**EX**	**EXCELLENT** SOME MINOR FAULTS/LOW-MOD RISK OF MINOR FAILURES
VIGOUR	**P**	**POOR** SIG. SIGNS OF LOST VIGOUR EG DIEBACK, REDUCED CANOPY	**F**	**FAIR** SIGNS OF REDUCED VIGOUR EG LEAF UNDER STRESS, STUNTING	**AV**	**AVERAGE** LOCALISED PATCHES OF LOST VIGOUR/NOT WIDESPREAD	**EX**	**EXCELLENT** NO EVIDENCE OF STRESS/SIGNS OF NEW GROWTH/WIDESPREAD
RETENTION	**TREES TO BE RETAINED**		**TREES TO BE REMOVED**			**TREE TO BE MONITORED DURING & POST CONSTRUCTION**		

SUMMARY TREE ASSESSMENT TABLE: HUNTER INDOOR SPORTS CENTRE

No	BOTANICAL NAME	COMMON NAME	AGE CLASS	HEIGHT [M]	DBH[1] [MM]	TPZ [M]	DARB[2] [MM]	SRZ [M]	USEFUL LIFESPAN [YEARS]	STRUCTURE	VIGOUR	TREE AZ	IMAGE REF (APPX A)	COMMENTS
17	*Melaleuca quinquenervia*	Swamp Paperbark	M	15	600	7.20	800	3.01	+40	AV	AV	A1	A5A	**17. [CoN TREE ID 67105]** [DBH: 440/410] SHIPPING CONTAINER PLACED NEAR TREE COVERING A PORTION OF ITS ROOT PLATE. **THIS TREE WILL NEED TO BE REMOVED.**
18	*Casuarina cunninghamiana*	River She-oak	M	14	490	5.88	700	2.85	+40	AV	AV	A1	A5A	**18. [CoN TREE ID 67104]** SOME MINOR SUCKER GROWTH FROM BASE. STAR PICKET EMBEDDED INTO THE BASE OF THE TREE. **THIS TREE WILL NEED TO BE REMOVED.**
19	*Melaleuca quinquenervia*	Swamp Paperbark	M	9	610	7.32	720	2.88	+40	F	AV	A1	A5B	**19. [CoN TREE ID 671098]** MINOR LIFT OF ADJOINING AC PATH CAUSED BY TREE ROOTS. TREE PLANTED HARD AGAINST FENCELINE. FENCE AFFECTED BY TREE. **THIS TREE WILL NEED TO BE REMOVED.**
20	*Casuarina cunninghamiana*	River She-oak	M	11	510[1]	6.12	540	2.55	+40	F	AV	A1	A7A-D	**20. [CoN TREE ID 67091] [DBH: 270/330/320] TREE LOCATED CLOSE TO BITUMEN CYCLEWAY CAUSING MINOR CRACKING TO SURFACE. AYSYMMETRIC CANOPY WITH BIAS TO THE NORTH. HERBICIDE BEING USED AT THE BASE THE TREE TO CONTROL GROWTH OF GRASS. MINOR STORM DAMAGE AND DEADWOOD PRESENT IN THE CANOPY. THIS TREE WILL NEED TO BE REMOVED.**
21	*Callistemon salignus*	Willow Bottlebrush	M	8	580	6.96	460	2.39	+40	F	AV	A1	A8A	**21. [CoN TREE ID 67087] [DBH: 230/280/330/220/130]MULTI CO-DOMINANT TRUNK. LOCATED ON SIDE-SLOPE TO ADJOINING OVAL. EVIDENCE OF PRIOR PRUNING. THIS TREE WILL NEED TO BE REMOVED.**
22	*Corymbia citriodora*	Lemon-scented Gum	M	17	570	6.84	730	2.90	+40	AV	AV	A1	A8B	**22. [CoN TREE ID 67058] OPEN CANOPY. CO-DOMINANT TRUNK @ 3.5M AGL. SOME OLD STORM DAMAGE WITH REMNANT BRANCH STUBS REMAINING WITH INCLUDED BARK. TO BE RETAINED**
23	*Melaleuca quinquenervia*	Swamp Paperbark	M	10	670	8.04	720	2.88	+40	AV	AV	A1	A8C	**23. [CoN TREE ID 67057] GOOD SPECIMENT WITH SPREADING CANOPY THAT HAS GROWN WITHOUT COMPETITION ALLOWING FOR CURRENT FORM. TO BE RETAINED**
24	*Lophostemon confertus*	Brush Box	SM	7	230*	2.76	390	2.23	15-40	F	AV	A1	A8D	**24. [CoN TREE ID 67086] [DBH: 170/1600] CO-DOMINANT TRUNK ARISING FROM NEAR GROUND LEVEL WITH INCLUDED BARK. SUPPRESSED CANOPY FROM TREE 21 . THIS TREE WILL NEED TO BE REMOVED.**
								o-domin						
TREES OCCURRING ON ADJOINING PROPERTIES														
A*	*Liquidambar formosana*	Chinese Sweet Gum	M	12	530	6.36	650	2.76	+40	AV	AV	A1	A5C	A. TREE LOCATED CLOSE TO CORNER BOUNDARY CLOSE TO FOOTPATH. EXTENSIVE SURFACE ROOTS. SOME RECENT REMOVAL OF LARGE LIMBS. **TO BE RETAINED.**
B*	*Callistemon viminalis*	Weeping Bottlebrush	M	7	560	6.72	530	2.53	15-40	F	AV	A1	A5D	B. [DBH: 250/330/370] TREE WITH ASYMMETRIC CROWN DUE TO COMPETITION FROM NEARBY TREE (RECENTLY REMOVED.) INCLUDED BARK AND REACTION WOOD PRESENT. SOME MINOR DEADWOOD OCCURRING WITHIN CANOPY. **TO BE RETAINED**
C*	*Callistemon viminalis*	Weeping Bottlebrush	M	8	520	6.24	500	2.47	15-40	F	AV	A1	A6A	C. [DBH: 380/360] BROAD, SPREADING CANOPY. TRUNK WITH PRONOUNCED SWEEP OCCURING @ 1200MM AGL WITH CANOPY COMPENSATING. **TO BE RETAINED**
D*	*Populus nigra* Ítalica'	Lombardy Poplar	M	11	380	4.56	380	2.20	+40	F	AV	A1	A6B	D. [DBH: 230/300] SUCKERS OCCURRING AT BASE. POSSIBLE RUST ON LEAVES. **MINOR ENCROACHMENT. TO BE RETAINED**
E*	*Populus nigra* Ítalica'	Lombardy Poplar	M	9	230	2.76	300	2.00	+40	F	AV	A1	A6B	E. SLIGHT MECHANICAL DAMAGE AT THE BASE OF THE TREE. IT APPEARS THAT THE TREE MAY BAVE BEEN LOPPED AT 3M AGL SOME TIME AGO AS SECONDARY GROWTH NOW WELL ESTABLISHED. **TO BE RETAINED**
F	*Melaleuca quinquenervia*	Swamp Paperbark	M	12	930	11.16	970	3.27	+40	AV	AV	A1	A7C	F. MULTI-TRUNKED TREE WITH 6 MAJOR LEADERS FORMING AT 800MM AGL. PAST PRUNING HAS BEEN DONE POORLY, RESULTING IN THE EXISTENCE OF BRANCH STUBS – SOME WITH WOOD ROT. GROUND AROUND THE BASE OF THE TREE HEAVILY COMPACTED BY STUDENTS GATHERING UNDRE THE TREE. NEARBY DISH DRAIN AFFECTED BY TREE ROOTS. **THREATENED TREE. IMPLEMENTATION OF TREE PROTECTION MANUAL REQUIRED.**
G*	*Eucalyptus robusta*	Swamp Mahogany	M	14	720	8.64	800	3.01	+40	AV	AV	A1	A7D	G. CO-DOMINANT TRUNK @ 1.3M AGL. SPREADING CANOPY. MINOR DEADWOOD AND EPICORMIC GROWTH THROUGHOUT. SURROUNDING GROUND MILDLY COMPACTED. MEDIUM CROWN DENSITY. **THREATENED TREE. IMPLEMENTATION OF TREE PROTECTION MANUAL REQUIRED.**
H														
I														
J														

1. MULTI-TRUNKED TREES HAVE AN AVERAGE MEASUREMENT CALCULATED IN ACCORDANCE WITH AS 4970. 2. DARB = DIAMETER AT ROOT BUTTRESS USED WHEN CALCULATING SRZ. * ASSUMED VALUES AS PROPERTY NOT ACCESSED

LEGEND									
AGE CLASS	**Y**	**YOUNG** SAPLING/HAS NOT REACHED 1ST ADULT FORM	**SM**	**SEMI-MATURE** DBH < 300mm/APPROACHING FULL HEIGHT	**M**	**MATURE** DBH BET. 300 -700/APPROACH. MAX HT & SPREAD	**OM**	**OVER-MATURE/SENESCENT** LGE DBH, LGE BRANCH FAILURES/STRUCT FAULTS
STRUCTURE	**P**	**POOR** NUMEROUS STRUCTURAL FAULTS/HIGH RISK OF SEVERE FAILURE	**F**	**FAIR** STRUCTURAL FAULTS PRESENT /MODERATE RISK OF SEVERE FAILURE	**AV**	**AVERAGE** SOME MINOR FAULTS /MODERATE RISK FOR MAJOR FAILURE	**EX**	**EXCELLENT** SOME MINOR FAULTS/LOW-MOD RISK OF MINOR FAILURES
VIGOUR	**P**	**POOR** SIG. SIGNS OF LOST VIGOUR EG DIEBACK, REDUCED CANOPY	**F**	**FAIR** SIGNS OF REDUCED VIGOUR EG LEAF UNDER STRESS, STUNTING	**AV**	**AVERAGE** LOCALISED PATCHES OF LOST VIGOUR/NOT WIDESPREAD	**EX**	**EXCELLENT** NO EVIDENCE OF STRESS/SIGNS OF NEW GROWTH/WIDESPREAD
RETENTION	**TREES TO BE RETAINED**		**TREES TO BE REMOVED -**				**TREE TO BE MONITORED DURING & POST CONSTRUCTION**	

APPENDIX C: TREE ASSESSMENT DIAGRAMS

FIGURE C1 – NRZ/SRZ DIAGRAM [BASE SURVEY SOURCE: DE WITT CONSULTING]

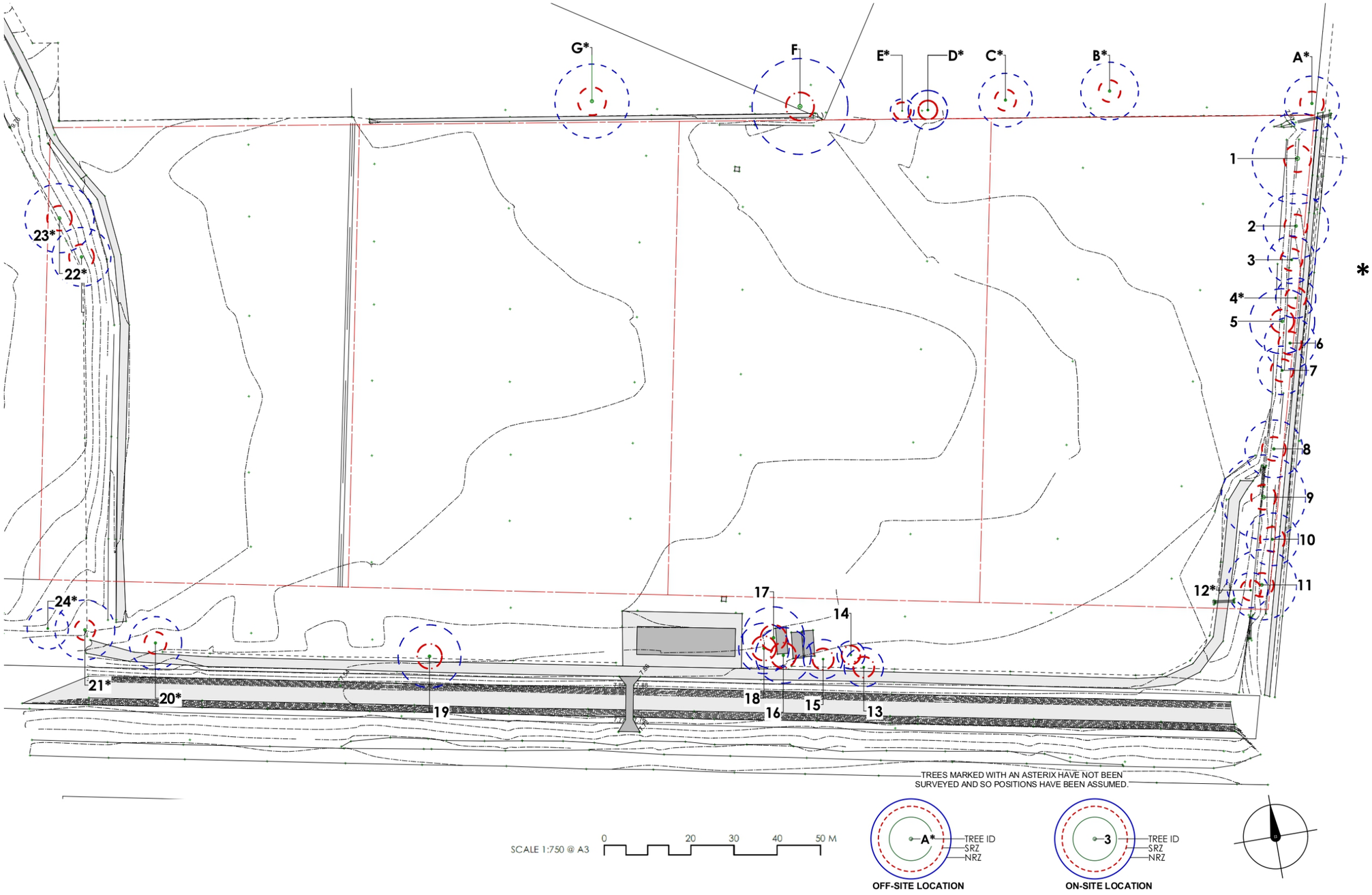
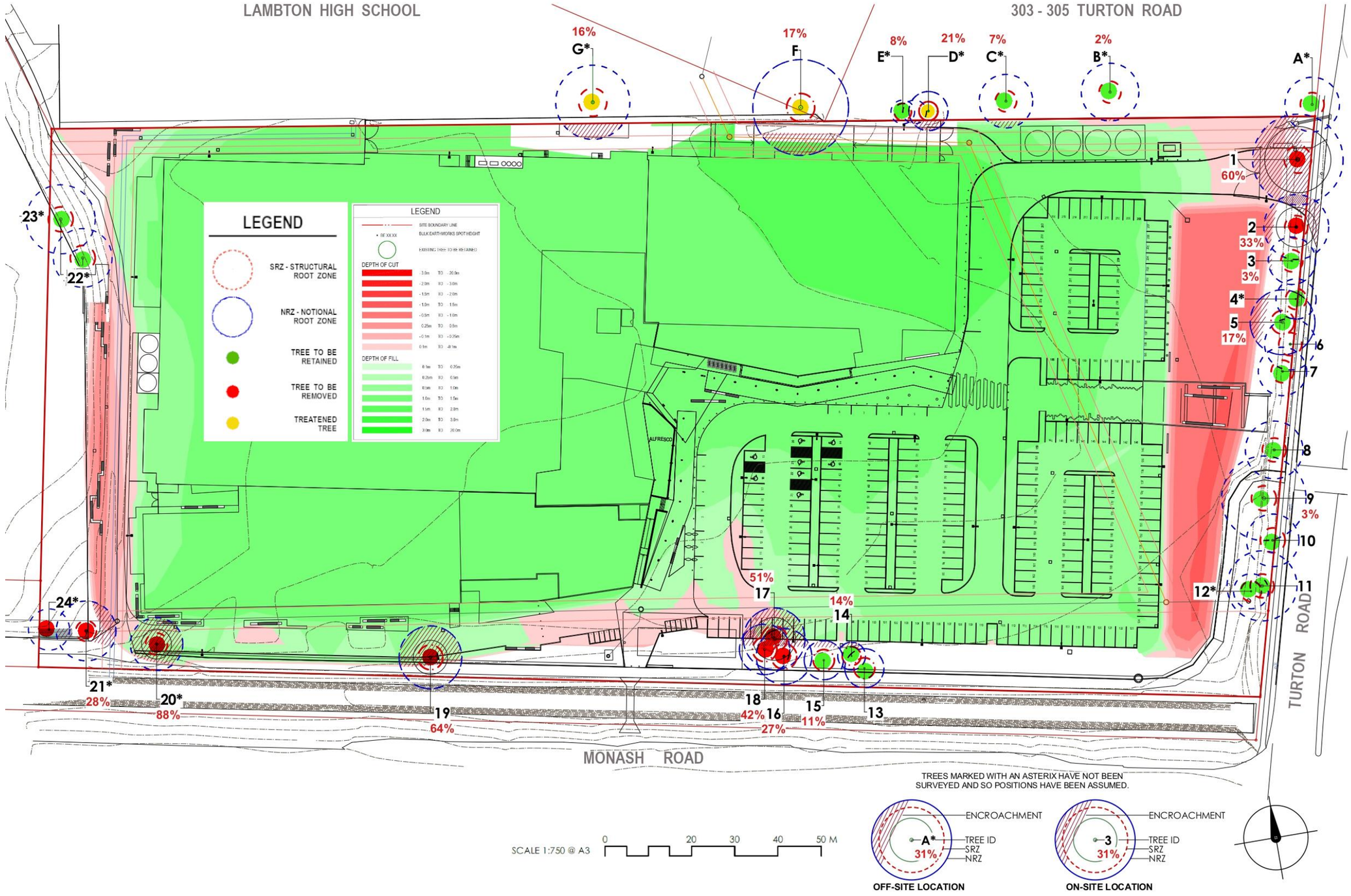


FIGURE C2 – TREE IMPACT ASSESSMENT DIAGRAM [BASE DRAWING SOURCE: EJE ARCHITECTURE & GROUNDSWELL]



APPENDIX D: PRELIMINARY TREE PROTECTION PLAN (PTPP)

This Preliminary Tree Protection Plan is comprised of the below Tree Protection Specification and the Tree Protection Diagram (TPD) (Appendix D3). It will be necessary to develop and amend the PTPP during the detailed design phase so that the specification and properly can reflect any changes that occur when finalising the design and taking into consideration the results of more detailed site investigations that occur post DA.

Tree Protection Specification

The following outlines in detail the responsibilities and work required to be undertaken by the adequately protect the trees to be retained.

D.1 GENERAL INSTRUCTIONS

- A Project Arborist is to be engaged **by the client** for the for full period of the contract including the Defects Liability Period.
- The Project Arborist must have qualifications equal to AQF Level 5 Arborist.
- Contact details, including mobile phone number, of the Project Arborist is supplied to the Construction Manager, Site Supervisor and other similar team members.
- Should any damage occur to the trees, both above and below ground components, then contact is to be made with the Project Arborist so that the damage may be inspected and remedial action taken, if required.
- All works proposed to be undertaken within the nominated NRZs of the threatened trees (refer Appendix D1) shall be discussed with the Project Arborist prior to the works commencing to ensure that the appropriate methods and equipment are being employed.
- Give a minimum of 24 hours' notice when requiring the Project Arborist to attend site and advise the client when such requests are made.

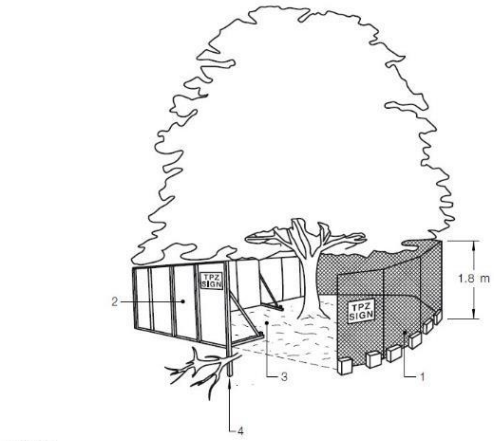
D.2 DESIGN/DOCUMENTATION PHASE

- The detailed design of the northern road occurring within the NRZ of Tree G, especially the detailing of the permeable paving, is to be undertaken with the involvement of the Project Arborist such that a structure is created that prevents damage to the tree's root plate. There is an element of risk associated with this work as noted above, and so an undertaking should be made with the school for the client to provide compensatory planting should the tree fail within five years after the completion of the project.
- The relocation of the sewer near to Tree F will also need close review to ensure there is no further encroachment in the tree's NRZ with specifications noting that excavations are be kept to a maximum width of 600mm.
- The detailed design of the pedestrian access from Turton Road will also require the involvement of the Project Arborist to ensure Trees 7 and 8 can be retained.
- The Project Arborist should supply a Certificate of Compliance affirming that the proposed works as documented complies with the recommendations of the AIA (Bark, 2025).

D.3 PRE-CONSTRUCTION PHASE

- A pre-construction meeting is to be held on site with the Project Arborist and relevant members of construction team, including the Construction Manager and Site Supervisor (or similar), to discuss all aspects of the TPP including: the erection of tree protection measures and management of the works within the TPZs.
- Erect tree protection measures as described in this TPP and as shown in the Tree Protection Diagram (Appendix C3). Tree Protection Fencing (TPF) shall comply with the requirements of AS 4970-2025 *Protection of trees on development sites.* (Refer Figure D2)
- Signs shall be attached to the TPF (or temporary site fencing, if appropriate) notifying people of the presence of NRZs and shall include the name and contact details of the Project Arborist. (Refer Figure D1 or similar.)
- It is further suggested with the approval of the high school, to the base of Tree F: remove picnic seating; hand cultivate the NRZ area to a depth of 100mm-150mm to break-up the surface crust; undertake an application of a plant growth regulator that assists the initiation of compensatory root growth (e.g. Seasol®); apply 25mm (approx.) of a root zone conditioner (e.g. soured lucerne, worm castings and well-composted mulch followed by 50mm (approx.) thick application of an organic mulch (e.g. Mixed Leaf and Wood Chip Mulch) for the purpose of retaining moisture and to provide a protective layer to prevent further compaction.

FIGURE D1: EXAMPLE OF TPZ SIGN
SOURCE: www.newsigns.com.au



LEGEND:
1 Chain wire mesh panels with shade cloth (if required) attached, held in place with concrete feet.
2 Alternative plywood or wooden paling fence panels. This fencing material also prevents building materials or soil entering the TPZ.
3 Mulch installation across surface of TPZ (at the discretion of the project arborist). No excavation, construction activity, grade changes, surface treatment or storage of materials of any kind is permitted within the TPZ.
4 Bracing is permissible within the TPZ. Installation of supports should avoid damaging roots.

FIGURE D2: TREE PROTECTION FENCING (TPF)
[SOURCE: AS 4970-2025 – NOTE: TPZ = NRZ]

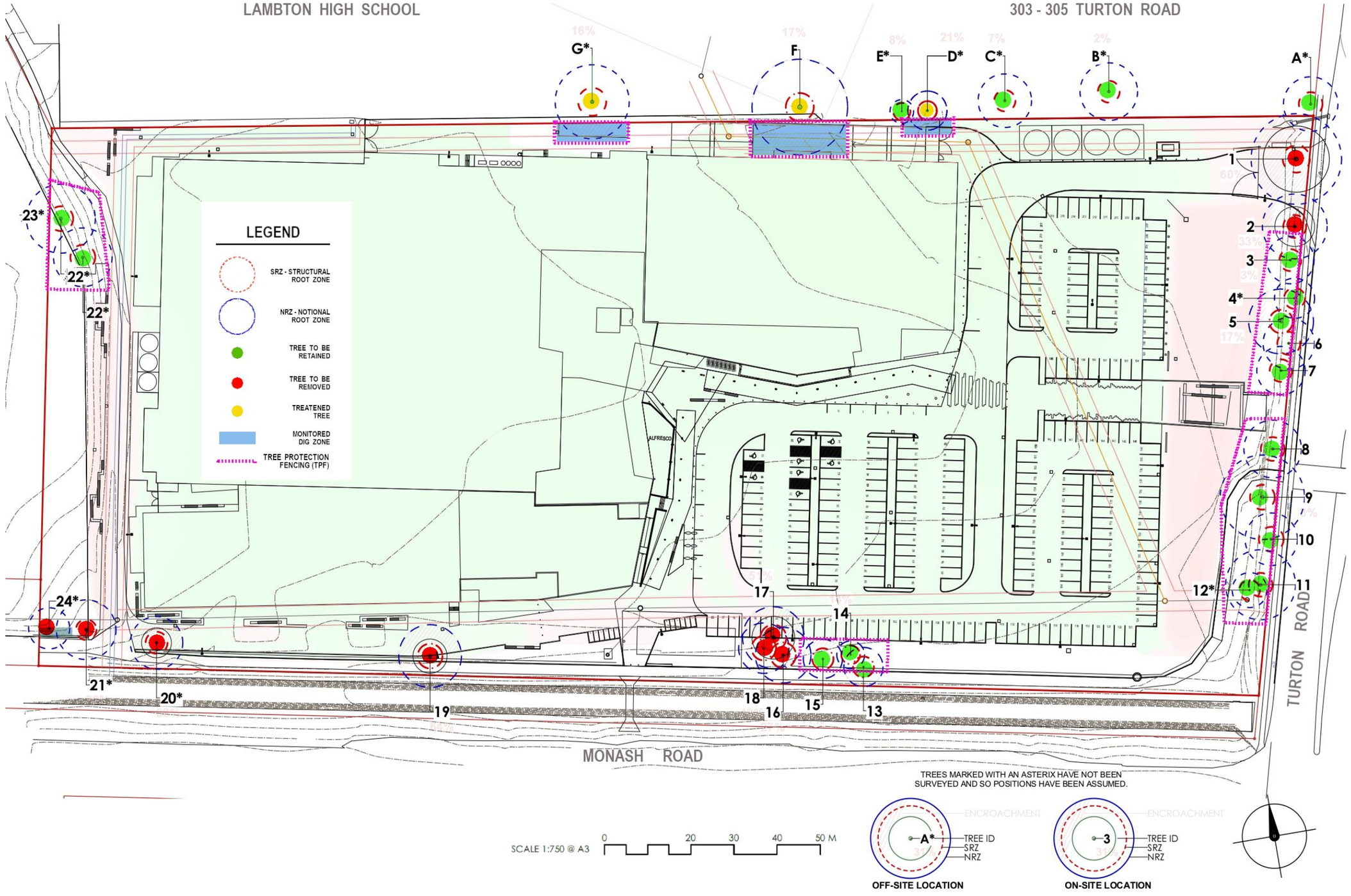
D.4 CONSTRUCTION PHASE

- During induction sessions and toolbox talks with the construction team, and its sub-contractors, if relevant, reference should be made to the restrictions of undertaking work within the NRZs.
- Any excavation works to be carried out within the NRZs shall be supervised by the Project Arborist. This is particularly important when undertaking work within the nominated Monitored Dig Zone as root mapping will be required prior to any excavation works. (Refer Appendix C3).
- Any required branch removal shall only be undertaken with the written approval of the Project Arborist and undertaken in accordance with the requirements of AS 4373-2007 *Pruning of amenity trees.*
- Any exposed roots are to be temporarily protected, such as overlaying form ply sheeting and dampened hessian.
- Any root pruning, if required, shall be inspected and instructions given by the Project Arborist. The work shall then be supervised by the Project Arborist. Only clean, sharp implements are to be used.
- All care should be taken to keep woody roots intact. Any roots encountered being less than 50mm diameter may be neatly severed using clean, sharp tools ensuring not to leave ragged cuts.
- Any root pruning should be undertaken to meet the requirements of AS 4373-2007 *Pruning of amenity trees* with the work being undertaken by at least an AQF3 Arborist in accordance with *Guide to Managing Risks of Tree Trimming and Removal Work* (Safe Work Australia 2016).
- Roots once cut shall be kept moist using hessian-like material until covered over. Severed roots shall be treated with a suitable root growth hormone with the active ingredients Indole-3-Butyric Acid (IBA) and 1-Nathylacetic Acid (NAA) to assist with regeneration of the root system.

D.5 POST-CONSTRUCTION PHASE

- Remove tree protection measures at the completion of the works.
- Arrange for the Project Arborist to undertake a final inspection and provide a certificate confirming that the TPP has been complied with documenting any inconsistencies or departures. This report shall be made available to the consent authority upon request.
- The Project Arborist shall undertake an inspection of the trees two weeks prior to the end of the Defects Liability Period and report on their condition and provide a report detailing the results of the inspection.

FIGURE D3 – TREE PROTECTION DIAGRAM (TO BE READ IN CONJUNCTION WITH APPENDIX D) [BASE DRAWING SOURCE: EJE ARCHITECTURE]



APPENDIX E: TREE AZ

The following table provides supplementary information to assist in interpreting the previous tables with respect to Tree AZ classifications.

TREE AZ CATEGORIES

CATEGORY Z: UNIMPORTANT TREES NOT WORTHY OF BEING A MATERIAL CONSTRAINT	
Local policy exemptions: Trees that are unsuitable for legal protection for local policy reasons including size, proximity and species.	
Z1	Young or insignificant small trees, i.e. below the local size threshold for legal protection.
Z2	Too close to a building i.e. exempt from legal protection because of proximity.
Z3	Species that cannot be protected for other reasons, i.e. scheduled noxious weeds, out of character in a setting of acknowledged importance, etc
High risk of death or failure: Trees that are likely to be removed within 10 years because of acute health issues or severe structural failure	
Z4	Dead, dying, diseased or declining
Z5	Severe damage and/or structural defects where a high risk of failure **cannot** be satisfactorily reduced by reasonable remediation care, i.e. cavities, decay, included bark, wounds, excessive imbalance, overgrown and vulnerable to adverse weather conditions.
Z6	Instability, i.e. poor anchorage and/or increased exposure.
Excessive nuisance: Trees that are likely to be removed within 10 years because of unacceptable impact on people	
Z7	Excessive, severe and intolerable inconvenience to the extent that a locally recognised court or tribunal would be likely to authorise removal, i.e. dominance, debris and/or interference.
Z8	Excessive, severe and intolerable damage to property to the extent that a locally recognised court or tribunal would be likely to authorise removal, i.e. severe structural damage to surfacing and buildings.
Good management: Trees that are likely to be removed within 10 years through responsible management of the tree population	
Z9	Severe damage and/or structural defects where high risk of failure can be **temporarily** reduces by reasonable remedial care, i.e. cavities, decay, included bark, wounds, excessive imbalance, overgrown and vulnerable to adverse weather conditions.
Z10	Poor condition or location with a low potential for recovery or improvement, i.e. dominated by adjacent trees or buildings and/or poor architectural framework.
Z11	Removal would benefit better adjacent trees, i.e. relieve physical interference and/or suppression.
Z12	Unacceptably expensive to retain, i.e. severe defects requiring excessive levels of maintenance.

NOTE: Z trees with a high risk of death/failure (Z4, Z5 & Z6) or causing severe inconvenience (Z7 & Z8) at the time of assessment and need an urgent risk assessment can be designated as ZZ. ZZ trees are likely to be unsuitable for retention and at the bottom of the categorisation hierarchy. In contrast, although Z trees are not worthy of influencing new designs, urgent removal is not essential and they could be retained in the short term, if appropriate.

CATEGORY A: IMPORTANT TREES SUITABLE FOR RETENTION FOR MORE THAN 10 YEARS AND WORTHY OF BEING A MATERIAL CONSTRAINT	
A1	No significant defects and could be retained with minimal remedial care.
A2	Minor defects that could be addressed remedial care and/or work to adjacent trees.
A3	Special significance for historical, cultural, commemorative or rarity reasons that would warrant extraordinary efforts to retain for more than 10 years.
A4	Trees that may be worthy of legal protection form ecological reasons (Advisory requiring specialist assessment)

NOTE: Category A1 trees that are already large and exceptional, or have potential to become so with minimal maintenance, can be designated as AA at the discretion of the assessor. Although all A trees are sufficiently important to be material constraints, AA trees are at the top of the categorisation hierarchy and should be given the most weight in any selection process.

CAUTION: Tree AZ assessments must be carried out by a competent person qualified and experienced in arboriculture. The preceding category descriptions are designed to be a brief field reference and are not to be self explanatory. They must be read in conjunction with the most current explanations published at www.treeaz.com

REV	DESCRIPTION	DATE
A	DRAFT REPORT FOR CLIENT REVIEW	2024-03-25
B	REVISED REPORT FOR CLIENT REVIEW	2024-05-22
C	SUBMISSION	2024-05-22
D	AMENDMENTS RESPONDING TO REVISED DESIGN	2025-06-12