

Council Assessment Panel Agenda & Reports

19 February 2024

Our Vision

*A City which values its heritage, cultural diversity,
sense of place and natural environment.*

*A progressive City which is prosperous, sustainable
and socially cohesive, with a strong community spirit.*

City of Norwood Payneham & St Peters
175 The Parade, Norwood SA 5067

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City of
Norwood
Payneham
& St Peters

14 February 2024

To all Members of the Council Assessment Panel:

- Mr Terry Mosel (Presiding Member)
- Ms Jenny Newman
- Mr Mark Adcock
- Mr Ross Bateup
- Cr Christel Mex

NOTICE OF MEETING

I wish to advise that pursuant to Clause 1.5 of the Meeting Procedures, the next Ordinary Meeting of the Norwood Payneham & St Peters Council Assessment Panel, will be held in the Council Chambers, Norwood Town Hall, 175 The Parade, Norwood, on:

Monday 19 February 2024, commencing at 7.00pm.

Please advise Kate Talbot on 8366 4562 or email ktalbot@npsp.sa.gov.au if you are unable to attend this meeting or will be late.

Yours faithfully



Geoff Parsons
ASSESSMENT MANAGER

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City of
Norwood
Payneham
& St Peters

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VENUE Council Chambers, Norwood Town Hall

HOUR

PRESENT

Panel Members

Staff

APOLOGIES

ABSENT

1. **COMMENCEMENT AND WELCOME**
2. **APOLOGIES**
3. **CONFIRMATION OF THE MINUTES OF THE MEETING OF THE COUNCIL ASSESSMENT PANEL HELD ON 17 JANUARY 2024**
4. **DECLARATION OF INTERESTS**

5. DEVELOPMENT APPLICATIONS – PDI ACT

**5.1 DEVELOPMENT NUMBER 24000067 – CITY OF NORWOOD PAYNEHAM & ST PETERS –
 188 O G ROAD, FELIXSTOW**

DEVELOPMENT NO.:	24000067
APPLICANT:	City of Norwood Payneham & St Peters
ADDRESS:	188 O G RD FELIXSTOW SA 5070 188 O G RD FELIXSTOW SA 5070 188 O G RD FELIXSTOW SA 5070
NATURE OF DEVELOPMENT:	Variation to Development Applications 22017508 and 23024217 comprising the removal of Tree 2 (a significant Flooded Gum)
ZONING INFORMATION:	Zones: <ul style="list-style-type: none"> • Housing Diversity Neighbourhood Overlays: <ul style="list-style-type: none"> • Affordable Housing • Future Road Widening • Hazards (Flooding) • Heritage Adjacency • Hazards (Flooding - General) • Local Heritage Place • Prescribed Wells Area • Regulated and Significant Tree • Stormwater Management • Traffic Generating Development • Urban Transport Routes • Urban Tree Canopy • Water Resources • Airport Building Heights (Regulated) • Advertising Near Signalised Intersections
LODGEMENT DATE:	9 Jan 2024
RELEVANT AUTHORITY:	Assessment panel/Assessment manager at City of Norwood, Payneham and St. Peters
PLANNING & DESIGN CODE VERSION:	P&D Code (in effect) Version 2023.19 - 21 December 2023
CATEGORY OF DEVELOPMENT:	Code Assessed - Performance Assessed
NOTIFICATION:	No
RECOMMENDING OFFICER:	Kieran Fairbrother Senior Urban Planner
REFERRALS STATUTORY:	Nil
REFERRALS NON-STATUTORY:	Nil

CONTENTS:

APPENDIX 1:	Relevant P&D Code Policies	ATTACHMENT 3:	Applicant's Responses
ATTACHMENT 1:	Application Documents	ATTACHMENT 4:	Instrument of Delegation to the CAP
ATTACHMENT 2:	Subject Land Map	ATTACHMENT 5:	Approved Site Plan

DETAILED DESCRIPTION OF PROPOSAL:

By way of development authorisation 22017508, the Applicant obtained planning consent for the “demolition of existing swimming pools, pavilion and minor structure and the construction of new swimming pools, pavilion, plant room, pool enclosure and shade structures”. Several variations to the proposal were then made and approved as part of development authorisation 23024217. For both of these Development Authorisations, the Applicant sought to retain the tree that is the subject of this application and were able to demonstrate how the proposed development could occur without impacting the tree.

Now, the Applicant seeks removal of this significant tree for several reasons including, but not limited to, construction efficiencies, costs savings, the ability to use the space under the tree as recreation space, and preventing potential damage to the new swimming pool.

SUBJECT LAND & LOCALITY:

Site Description:

Location reference: 188 O G RD FELIXSTOW SA 5070

Title ref.: CT 5386/506	Plan Parcel: D42573 QP23	Council: THE CITY OF NORWOOD PAYNEHAM AND ST PETERS
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Location reference: 188 O G RD FELIXSTOW SA 5070

Title ref.: CT 5859/643	Plan Parcel: D58460 AL100	Council: THE CITY OF NORWOOD PAYNEHAM AND ST PETERS
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Location reference: 188 O G RD FELIXSTOW SA 5070

Title ref.: CT 5744/453	Plan Parcel: F40075 AL16	Council: THE CITY OF NORWOOD PAYNEHAM AND ST PETERS
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Shape:	irregular
Frontage width:	approx. 133m to O G Road / approx. 120m to Payneham Road
Area:	approx. 49 hectares
Topography:	relatively flat
Existing Structures:	swimming pools and associated amenities buildings and other ancillary structures
Existing Vegetation:	several large trees, some of which are regulated or significant, and other lower-lying plants and grasses

The development site does not comprise the whole of these three allotments, however, as roughly demonstrated in **Attachment 2**.

Locality

The development site has a direct frontage to O G Road and sits between a public library to the north and a large car parking area and commercial building to the south, characterising the east side of O G Road as one of a distinctly commercial character. The western side of O G Road, however, is characterised by low-rise residential living. A creek and large recreational field border the development site to the east, both of which extend from Turner Road through to Payneham Road.

Thus, the locality has a mixed character, with medium-density residential housing to the west separated from the open expanses of space to the east.

CONSENT TYPE REQUIRED:

Planning Consent

CATEGORY OF DEVELOPMENT:

- **PER ELEMENT:**
Tree-damaging activity: Code Assessed - Performance Assessed

- **OVERALL APPLICATION CATEGORY:**
Code Assessed - Performance Assessed

- **REASON**
P&D Code

PUBLIC NOTIFICATION

- NOT REQUIRED

AGENCY REFERRALS

Nil

INTERNAL REFERRALS

Nil

PLANNING ASSESSMENT

The application has been assessed against the relevant provisions of the Planning & Design Code, which are contained in Appendix One.

Tree-Damaging Activity

Performance Outcome 1.2 of Regulated and Significant Tree Overlay states:

“Significant trees are retained where they:

- (a) Make an important contribution to the character or amenity of the local area*
- (b) Are indigenous to the local area and are listed under the National Parks and Wildlife Act 1972 as rare or endangered native species*
- (c) Represent an important habitat for native fauna*
- (d) Are part of a wildlife corridor or a remnant area of native vegetation*
- (e) Are important to the maintenance of biodiversity in the local environment and/or*
- (f) Form a notable visual element to the landscape of the local area.”*

The arborist report provided by the Applicant (**Attachment 1**) states that the tree “appears to be popular with parrots”, with several hollows within the tree showing signs of birds pecking at the bark, thereby representing an important habitat for native fauna. The tree is set back approximately 90m from the closest street boundary, is set amongst other larger trees and bushes and is therefore not readily visible from the public realm outside of the subject land. Accordingly, the tree does not form a notable visual element to the landscape of the local area and it is debatable whether or not it makes an important contribution to the character of the area. Nonetheless, as with most healthy trees, the tree is considered to make an important contribution to the amenity of the locality of the area. The tree is consequently considered to be worthy of retention in accordance with Performance Outcome 1.2 above.

Whether or not removal of the tree is justified is therefore contingent upon satisfaction of either Performance Outcomes 1.3 or 1.4 of the Regulated and Significant Tree Overlay – where the latter considers circumstances where tree removal is sought in connection with other development, and the former considers the opposite.

Performance Outcome 1.4 of the Regulated and Significant Tree Overlay states:

- “A tree-damaging activity in connection with other development satisfies all of the following:*
- (a) It accommodates the reasonable development of land in accordance with the relevant zone or subzone where such development might not otherwise be possible*
 - (b) In the case of a significant tree, all reasonable development options and design solutions have been considered to prevent substantial tree-damaging activity occurring.”*

Although this application is only for the removal of the tree, it is still considered to be in connection with other development because the Applicant’s reasons for removal sufficiently align with the development proposed for the subject land that was approved as part of the earlier Development Authorisations. To put it another way, the Applicant would likely not be seeking the removal of the tree were it not for the proposed redevelopment of the land.

The first limb of PO 1.4(a) considers whether the proposed development of the land is reasonable in the context of the zone or subzone. Given that there is a valid development authorisation in place for the proposed development, the development can be considered reasonable, and this limb is therefore satisfied.

The second limb of PO 1.4(a), however, requires consideration of whether the development is *possible* without necessitating a tree-damaging activity. In this instance, the entirety of the construction works associated with the Development Authorisation are located outside of the Tree Protection Zone (TPZ) of the subject tree and the Applicant was able to demonstrate as part of the original development authorisation that the development is possible without removal of the tree being necessary.

However, it is now the Applicant’s submission that the retention of the tree will incur significant construction costs that were not understood when the earlier development applications were lodged and determined. Such additional costs have only now come to light as a result of the tender process undertaken for the project, and it is the Applicant’s submission that the incursion of these costs would be an unreasonable burden to place on the development.

In particular, the additional costs associated with the retention of the tree will arise predominantly from two circumstances. Firstly, the applicant suggests that to construct the buildings and amenities associated with the swimming pool, the existing pool will need to be backfilled to create an area from which cranes and other heavy vehicles and equipment can operate (because they are all excluded

from entering the TPZ of the significant tree). Following construction of those buildings, the existing pool area would then need to be re-excavated and the new swimming pool could begin construction. If the tree was able to be removed, this area currently occupied by the tree and its TPZ could be better used during construction for the storage of vehicles, equipment and work areas, enabling a more efficient construction program.

Secondly, and arguably more impactful, is the fact that site investigations have discovered a considerable volume of contaminated waste in parts of the site. This waste needs to be removed, treated and somehow disposed as part of the development of this land. Current EPA guidelines¹ provide that the best practice in this respect is for contaminated waste to be treated and contained on site through burial and capping. Uncontrolled fill cannot be stored under buildings or structures and so the only real area available on-site for the contaminated fill to be stored would be in the area currently occupied by the subject significant tree. If the subject tree has to be retained, then this waste will need to be disposed at an appropriate facility which comes at a considerable expense.

The Applicant has advised the author of this report that the exact quantum of these additional costs is “commercial in confidence” and therefore an exact figure cannot be provided to the Panel. However, these costs may no longer be confidential information by the time of the meeting at which the Panel will determine this Item, and so the Applicant may be able to provide further clarity to the Panel as to costs at the meeting, should the Panel wish to make such enquiries. Notwithstanding, the Applicant has advised that the cost is ‘in excess of \$1 million’.

It is the author’s construction of Performance Outcome 1.4 above, and specifically criterion (a), that the question of “*reasonable development*” as expressed within that criterion only requires consideration of whether the development is reasonable in the context of “*the relevant zone or subzone*”, and it does not extend further to require consideration of whether other factors associated with the development – such as cost – are reasonable or not. It is the author’s reading that the words “*in accordance with the relevant zone or subzone*” operate upon the words “*the reasonable development of the land*”, and the two are inextricably linked such that the phrase cannot be read and construed in any way except as a whole. In this context, the question of whether the costs associated with the retaining the tree are reasonable is not a question to be considered.

However, there is an argument that the question of the reasonability of such costs goes to determining whether the development is “possible”. On this point, Council administration sought advice from its solicitors, which will be provided to the Panel separately to this report. The phrase “*where such development might not other be possible*” should, in the opinion of Council’s solicitors, be read as imposing a degree of objective reasonableness. This test in the second limb of PO 1.4(a) therefore requires consideration of whether the expectations that would be made of the applicant – in respect of costs and other matters – in undertaking the development and retaining the tree are objectively reasonable to expect of a person.

What this test does not require, based on the advice received by Council’s solicitors, is specific consideration of the applicant’s specific circumstances – i.e. whether or not they specifically can afford to undertake the development in a manner that retains the tree, and therefore whether the development is possible. The overarching intent of PO 1.4(a) is to ensure development can continue to occur on land in a manner contemplated by the Code, and that the existence of a regulated or significant tree on that land should not prevent the development from proceeding if to do so would place an unreasonable burden on the person undertaking the development, even if that development would still be possible in a strict sense.

¹ See Section 11.2 of the EPA’s *Guidelines for the assessment and remediation of site contamination* (2019), https://www.epa.sa.gov.au/files/13544_sc_groundwater_assessment.pdf;
See also: *Key Principles for the Remediation & Management of Contaminated Sites*, <https://www.nepc.gov.au/sites/default/files/2022-09/asc-nepm-key-principles-summary-remediation-management-final-draft.pdf>.

With this in mind, the additional costs that would be incurred if the tree were to be retained are considered unreasonable in the circumstances. The development is therefore not considered to be objectively possible in accordance with PO 1.4(a) of the Regulated and Significant Tree Overlay.

Performance Outcome 1.4 requires both criteria (a) and (b) to be satisfied for removal of a significant tree to be justified. By way of reminder, PO 1.4(b) states:

“(b) in the case of a significant tree, all reasonable development options and design solutions have been considered to prevent substantial tree-damaging activity occurring.”

Given the commentary above in relation to criterion (a) of PO 1.4, satisfaction of this criterion appears to be a foregone conclusion. Nonetheless, consideration must be given.

The removal of the subject tree is not necessitated by the design of the development, because the works are contained wholly outside the TPZ of the tree and have been designed to ensure the tree can remain protected and healthy. Rather, it is the undertaking of the construction work associated with the development that results in the contaminated material being uncovered; and it is the tree's presence – in conjunction with the scale and siting of the approved development – that then necessitates the costly off-site disposal of this contaminated waste; and it is the tree's presence that necessitates the bulk earthworks required and the inefficient and costly staging of the construction work.

So, when one considers what alternative development options or design solutions may exist to avoid the removal of the tree, only two options come to mind.

The first is to dramatically reduce the scale and siting of the already-approved development so the contaminated demolition material can remain on-site and a more efficient works schedule can be produced and undertaken. This option is not considered reasonable because it would be contrary to the intent of PO 1.4(a), which is that the existence of a tree should not, of itself, prohibit or seriously limit the reasonable development of the land.

The second alternative is to undertake the development as contemplated in the previous Development Authorisations – which was shown to be possible without necessitating the removal of the tree – but with the incursion of the additional expenses associated with the newly-discovered challenges. This option is not considered reasonable for the reasons outlined in earlier discussion.

Accordingly, Performance Outcome 1.4 of the Regulated and Significant Tree Overlay is considered satisfied, and the removal of the tree is justified in the circumstances.

Section 127 of the *Planning, Development and Infrastructure Act 2016* and Regulation 59 of the *Planning, Development and Infrastructure (General) Regulations 2017* together provide that:

- if a development authorisation provides for the removal of a significant tree, the authorisation must be subject to a condition that a prescribed number of trees be planted and maintained to replace the tree to be removed;
- in respect of a significant tree, three (3) replacement trees are prescribed;
- and, along with other criteria, the replacement trees cannot be planted within 10m of an existing swimming pool.

Where there is no opportunity for an applicant to plant the required replacement trees on-site in accordance with the regulations then an applicant may pay into an urban tree fund in lieu of the trees not able to be planted. In this case, however there is sufficient room along the eastern side of the development site for the planting of three replacement trees that will be more than 10m from the

swimming pool and so this will be required of the applicant if the Panel chooses to grant consent to this application (see Condition No 3).

Additionally, the applicant has advised of their intention to plant more than the required three (3) replacement trees as they intend on making this area a usable recreation area for the benefit of users of the facility. Accordingly, a reserved matter has been recommended (which the applicant is happy to accept) that requires a detailed landscaping plan to be provided to the satisfaction of the Assessment Manager prior to full development approval being issued.

RECOMMENDATION

It is recommended that the Council Assessment Panel resolve that:

1. Pursuant to Section 107(2)(c) of the Planning, Development and Infrastructure Act 2016, and having undertaken an assessment of the application against the Planning and Design Code, the application is NOT seriously at variance with the provisions of the Planning and Design Code; and
2. Development Application Number 24000067, by City of Norwood Payneham & St Peters is granted Planning Consent subject to the following conditions and reserved matter:

RESERVED MATTER Planning Consent

A detailed landscaping plan showing a suitable mix and density of trees, shrubs and groundcovers, and providing details for the on-going maintenance of the landscaping, shall be provided to the reasonable satisfaction of the Assessment Manager prior to Development Approval being granted.

Note: Further conditions may be imposed on the Planning Consent following satisfaction of the above matter.

Reason: to ensure that appropriate canopy cover, shade and amenity continues to be enjoyed by occupants and users of the facility following the loss of the significant tree herein approved for removal.

CONDITIONS Planning Consent

Condition 1

The development granted Planning Consent shall be undertaken and completed in accordance with the stamped plans and documentation, except where varied by conditions below (if any), noting that all previous stamped plans and documentation, including conditions previously granted Planning Consent for Development Application ID No's 22017508 and 23024217 are still applicable except where varied by this authorisation.

Condition 2

Condition No 2 imposed on Planning Consent for Development Application ID No 23024217 is hereby deleted and replaced by the following:

With respect to Tree 1 and Tree 3 detailed in the Arboricultural Impact Assessment (AIA), dated 20 June 2022, prepared by Urbans Arboriculture, the following measures shall be undertaken in addition to the recommendations contained in the AIA:

- all service trenches shall avoid each tree's Tree Protection Zone (TPZ) where possible. Where this is deemed not possible, exploratory work for the service trenches shall be undertaken under the supervision of a level 5 arborist (or higher), with any structural roots of a diameter of 25mm or greater being retained where possible;
- the paving in the vicinity of Tree 1 be undertaken in accordance with amended plan 21-0255 (Drawing No. AA1221, dated 13/07/23) herein granted Planning Consent, and where excavation is required for the alignment of the paths and for stormwater or irrigation purposes it to be undertaken using boring or hydrovac excavation methods as appropriate under the supervision of a level 5 (or higher) arborist;
- physical tree protection barriers are to be installed with signage for the full duration of the works for the full extent of undisturbed TPZs (that is the areas of the TPZ within which no work is proposed), or to the largest extent possible, and not removed without consent of the Project Arborist;
- Irrigation must not be turned off between the months of October to May as the significant trees have developed a reliance on irrigation over time. Alternatively, supplementary watering shall be provided during this time; and
- any pruning should be undertaken by, or in the presence of, the Project Arborist, including any root pruning.

Condition No 3

Three (3) replacement trees, with a minimum mature height of 5 metres, shall be planted on the subject land as soon as is practical within 12 months of the removal of the significant tree herein approved. The replacement trees shall not be planted within 10 metres of a dwelling or in ground swimming pool and cannot be of a species identified in Regulation 3F(4)(b) of the Planning, Development and Infrastructure (General) Regulations 2017.

ADVISORY NOTES Planning Consent

Advisory Note 1

Appeal Rights - General rights of review and appeal exist in relation to any assessment, request, direction or act of a relevant authority in relation to the determination of this application, including conditions.

Advisory Note 2

No work can commence on this development unless a Development Approval has been obtained. If one or more Consents have been granted on this Decision Notification Form, you must not start any site works or building work or change of use of the land until you have received notification that Development Approval has been granted.

Advisory Note 3

This approval varies the original consent / approval to which it applies, but it does not extend nor vary the operative date of the original consent / approval. The consent / approval must be acted upon within the operative date applicable, unless extended by the relevant authority via separate submission.

Advisory Note 4

The Applicant is reminded of its responsibilities under the *Environment Protection Act 1993*, to not harm the environment. Specifically, paint, plaster, concrete, brick wastes and wash waters should not be discharged into the stormwater system, litter should be appropriately stored on site pending removal, excavation and site disturbance should be limited, entry/exit points to the site should be managed to prevent soil being carried off site by vehicles, sediment barriers should be used (particularly on sloping sites), and material stockpiles should all be placed on site and not on the footpath or public roads or reserves. Further information is available by contacting the EPA.

188 O G RD FELIXSTOW SA 5070

Address:

Click to view a detailed interactive [SAILIS](#) in SAILIS

To view a detailed interactive property map in SAPPA click on the map below



Property Zoning Details

Zone

Housing Diversity Neighbourhood

Overlay

Airport Building Heights (Regulated) (All structures over 45 metres)

Advertising Near Signalised Intersections

Affordable Housing

Future Road Widening

Hazards (Flooding)

Heritage Adjacency

Hazards (Flooding - General)

Local Heritage Place (7799)

Prescribed Wells Area

Regulated and Significant Tree

Stormwater Management

Traffic Generating Development

Urban Transport Routes

Urban Tree Canopy

Water Resources

Local Variation (TNV)

Minimum Frontage (Minimum frontage for a detached dwelling is 9m; semi-detached dwelling is 8m; row dwelling is 5m; group dwelling is 18m; residential flat building is 18m)

Minimum Site Area (Minimum site area for a detached dwelling is 330 sqm; semi-detached dwelling is 300 sqm; row dwelling is 200 sqm; group dwelling is 200 sqm)

Maximum Building Height (Levels) (Maximum building height is 2 levels)

Maximum Building Height (Levels) (Maximum building height is 3 levels)

Selected Development(s)

Tree-damaging activity

This development may be subject to multiple assessment pathways. Please review the document below to determine which pathway may be applicable based on the proposed development compliances to standards.

If no assessment pathway is shown this mean the proposed development will default to performance assessed. Please contact your local council in this instance. Refer to Part 1 - Rules of Interpretation - Determination of Classes of Development

Tree-damaging activity - Code Assessed - Performance Assessed

Part 2 - Zones and Sub Zones

Housing Diversity Neighbourhood Zone

Assessment Provisions (AP)

Desired Outcome (DO)

Desired Outcome	
DO 1	Medium density housing supports a range of needs and lifestyles, located within easy reach of a diversity of services and facilities. Employment and community service uses contribute to making the neighbourhood a convenient place to live without compromising residential amenity.

Table 5 - Procedural Matters (PM) - Notification

The following table identifies, pursuant to section 107(6) of the *Planning, Development and Infrastructure Act 2016*, classes of performance assessed development that are excluded from notification. The table also identifies any exemptions to the placement of notices when notification is required.

Interpretation

Notification tables exclude the classes of development listed in Column A from notification provided that they do not fall within a corresponding exclusion prescribed in Column B.

Where a development or an element of a development falls within more than one class of development listed in Column A, it will be excluded from notification if it is excluded (in its entirety) under any of those classes of development. It need not be excluded under all applicable classes of development.

Where a development involves multiple performance assessed elements, all performance assessed elements will require notification (regardless of whether one or more elements are excluded in the applicable notification table) unless every performance assessed element of the application is excluded in the applicable notification table, in which case the application will not require notification.

A relevant authority may determine that a variation to 1 or more corresponding exclusions prescribed in Column B is minor in nature and does not require notification.

Class of Development (Column A)	Exceptions (Column B)
1. Development which, in the opinion of the relevant authority, is of a minor nature only and will not unreasonably impact on the owners or occupiers of land in the locality of the site of the development.	None specified.
2. All development undertaken by: <ul style="list-style-type: none"> (a) the South Australian Housing Trust either individually or jointly with other persons or bodies or (b) a provider registered under the Community Housing National Law participating in a program relating to the renewal of housing endorsed by the South Australian Housing Trust. 	Except development involving any of the following: <ul style="list-style-type: none"> 1. residential flat building(s) of 3 or more building levels 2. the demolition (or partial demolition) of a State or Local Heritage Place (other than an excluded building) 3. the demolition (or partial demolition) of a building in a Historic Area Overlay (other than an excluded building).

<p>3. Any development involving any of the following (or of any combination of any of the following):</p> <ul style="list-style-type: none"> (a) ancillary accommodation (b) dwelling (c) dwelling addition (d) recreation area (e) residential flat building (f) retirement facility (g) student accommodation (h) supported accommodation. 	<p>Except development that:</p> <ul style="list-style-type: none"> 1. exceeds the maximum building height specified in Housing Diversity Neighbourhood Zone 3.1 or 2. involves a building wall (or structure) that is proposed to be situated on (or abut) an allotment boundary (not being a boundary with a primary street or secondary street or an excluded boundary) and: <ul style="list-style-type: none"> (a) the length of the proposed wall (or structure) exceeds 11.5m (other than where the proposed wall abuts an existing wall or structure of greater length on the adjoining allotment) or (b) the height of the proposed wall (or post height) exceeds 3m measured from the top of footings (other than where the proposed wall (or post) abuts an existing wall or structure of greater height on the adjoining allotment).
<p>4. Alteration of or addition to any development involving any of the following (or of any combination of any of the following):</p> <ul style="list-style-type: none"> (a) child care facility (b) community facility (c) educational facility. 	<p>Except development that does not satisfy Housing Diversity Neighbourhood Zone DTS/DPF 1.4.</p>
<p>5. Any development involving any of the following (or of any combination of any of the following):</p> <ul style="list-style-type: none"> (a) consulting room (b) office (c) shop. 	<p>Except development that:</p> <ul style="list-style-type: none"> 1. exceeds the maximum building height specified in Housing Diversity Neighbourhood Zone 3.1 or 2. does not satisfy Housing Diversity Neighbourhood Zone DTS/DPF 1.2 or 3. involves a building wall (or structure) that is proposed to be situated on (or abut) an allotment boundary (not being a boundary with a primary street or secondary street or an excluded boundary) and: <ul style="list-style-type: none"> (a) the length of the proposed wall (or structure) exceeds 11.5m (other than where the proposed wall abuts an existing wall or structure of greater length on the adjoining allotment) or (b) the height of the proposed wall (or post height) exceeds 3m measured from the top of footings (other than where the proposed wall (or post) abuts an existing wall or structure of greater height on the adjoining allotment).
<p>6. Any development involving any of the following (or of any combination of any of the following):</p> <ul style="list-style-type: none"> (a) air handling unit, air conditioning system or exhaust fan (b) carport (c) deck (d) fence (e) internal building works (f) land division (g) outbuilding (h) pergola (i) private bushfire shelter (j) replacement building (k) retaining wall (l) shade sail (m) solar photovoltaic panels (roof mounted) (n) swimming pool or spa pool and associated swimming pool safety features (o) temporary accommodation in an area affected by bushfire (p) tree damaging activity (q) verandah (r) water tank. 	<p>None specified.</p>
<p>7. Demolition.</p>	<p>Except any of the following:</p> <ul style="list-style-type: none"> 1. the demolition (or partial demolition) of a State or Local Heritage Place (other than an excluded building)

	2. the demolition (or partial demolition) of a building in a Historic Area Overlay (other than an excluded building).
8. Railway line.	Except where located outside of a rail corridor or rail reserve.

Placement of Notices - Exemptions for Performance Assessed Development

None specified.

Placement of Notices - Exemptions for Restricted Development

None specified.

Part 3 - Overlays

Local Heritage Place Overlay

Assessment Provisions (AP)

Desired Outcome (DO)

Desired Outcome	
DO 1	Development maintains the heritage and cultural values of Local Heritage Places through conservation, ongoing use and adaptive reuse.

Performance Outcomes (PO) and Deemed-to-Satisfy (DTS) Criteria / Designated Performance Feature (DPF)

Performance Outcome	Deemed-to-Satisfy Criteria / Designated Performance Feature
Landscape Context and Streetscape Amenity	
<p>PO 5.1</p> <p>Individually heritage listed trees, parks, historic gardens and memorial avenues are retained unless:</p> <ul style="list-style-type: none"> (a) trees / plantings are, or have the potential to be, a danger to life or property or (b) trees / plantings are significantly diseased and their life expectancy is short. 	<p>DTS/DPF 5.1</p> <p>None are applicable.</p>

Procedural Matters (PM) - Referrals

The following table identifies classes of development / activities that require referral in this Overlay and the applicable referral body. It sets out the purpose of the referral as well as the relevant statutory reference from Schedule 9 of the Planning, Development and Infrastructure (General) Regulations 2017.

Class of Development / Activity	Referral Body	Purpose of Referral	Statutory Reference
None	None	None	None

Regulated and Significant Tree Overlay

Assessment Provisions (AP)

Desired Outcome (DO)

Desired Outcome	
DO 1	Conservation of regulated and significant trees to provide aesthetic and environmental benefits and mitigate tree loss.

Performance Outcomes (PO) and Deemed to Satisfy (DTS) / Designated Performance Feature (DPF) Criteria

Performance Outcome	Deemed-to-Satisfy Criteria / Designated Performance Feature
Tree Retention and Health	
<p>PO 1.1</p> <p>Regulated trees are retained where they:</p> <ul style="list-style-type: none"> (a) make an important visual contribution to local character and amenity (b) are indigenous to the local area and listed under the <i>National Parks and Wildlife Act 1972</i> as a rare or endangered native species and / or (c) provide an important habitat for native fauna. 	<p>DTS/DPF 1.1</p> <p>None are applicable.</p>
<p>PO 1.2</p> <p>Significant trees are retained where they:</p> <ul style="list-style-type: none"> (a) make an important contribution to the character or amenity of the local area (b) are indigenous to the local area and are listed under the <i>National Parks and Wildlife Act 1972</i> as a rare or endangered native species (c) represent an important habitat for native fauna (d) are part of a wildlife corridor of a remnant area of native vegetation (e) are important to the maintenance of biodiversity in the local environment and / or (f) form a notable visual element to the landscape of the local area. 	<p>DTS/DPF 1.2</p> <p>None are applicable.</p>
<p>PO 1.3</p> <p>A tree damaging activity not in connection with other development satisfies (a) and (b):</p> <ul style="list-style-type: none"> (a) tree damaging activity is only undertaken to: <ul style="list-style-type: none"> (i) remove a diseased tree where its life expectancy is short (ii) mitigate an unacceptable risk to public or private safety due to limb drop or the like (iii) rectify or prevent extensive damage to a building of value as comprising any of the following: <ul style="list-style-type: none"> A. a Local Heritage Place B. a State Heritage Place C. a substantial building of value <p>and there is no reasonable alternative to rectify or prevent such damage other than to undertake a tree damaging activity</p> (iv) reduce an unacceptable hazard associated with a tree within 20m of an existing residential, tourist accommodation or other habitable building from bushfire (v) treat disease or otherwise in the general interests of the health of the tree and / or 	<p>DTS/DPF 1.3</p> <p>None are applicable.</p>

<p>(vi) maintain the aesthetic appearance and structural integrity of the tree</p> <p>(b) in relation to a significant tree, tree-damaging activity is avoided unless all reasonable remedial treatments and measures have been determined to be ineffective.</p>	
<p>PO 1.4</p> <p>A tree-damaging activity in connection with other development satisfies all the following:</p> <p>(a) it accommodates the reasonable development of land in accordance with the relevant zone or subzone where such development might not otherwise be possible</p> <p>(b) in the case of a significant tree, all reasonable development options and design solutions have been considered to prevent substantial tree-damaging activity occurring.</p>	<p>DTS/DPF 1.4</p> <p>None are applicable.</p>
Ground work affecting trees	
<p>PO 2.1</p> <p>Regulated and significant trees, including their root systems, are not unduly compromised by excavation and / or filling of land, or the sealing of surfaces within the vicinity of the tree to support their retention and health.</p>	<p>DTS/DPF 2.1</p> <p>None are applicable.</p>
Land Division	
<p>PO 3.1</p> <p>Land division results in an allotment configuration that enables its subsequent development and the retention of regulated and significant trees as far as is reasonably practicable.</p>	<p>DTS/DPF 3.1</p> <p>Land division where:</p> <p>(a) there are no regulated or significant trees located within or adjacent to the plan of division or (b) the application demonstrates that an area exists to accommodate subsequent development of proposed allotments after an allowance has been made for a tree protection zone around any regulated tree within and adjacent to the plan of division.</p>

Procedural Matters (PM) - Referrals

The following table identifies classes of development / activities that require referral in this Overlay and the applicable referral body. It sets out the purpose of the referral as well as the relevant statutory reference from Schedule 9 of the Planning, Development and Infrastructure (General) Regulations 2017.

Class of Development / Activity	Referral Body	Purpose of Referral	Statutory Reference
None	None	None	None

PAYNEHAM MEMORIAL SWIMMING CENTRE

Application for removal of significant tree and variation of existing Planning Consent.

Background

The redevelopment of the Payneham Memorial Swimming Centre at 188 O G Road Felixstow, is proposed to create a brand-new contemporary all aquatic facility for the community with all year-round access and availability which meets all current access, inclusion, and legislative requirements as well as community expectations.

Development Approval has been achieved as per the table below:

STATUTORY APPROVALS - DEVELOPMENT & INFRASTRUCTURE ACT 2016										
26-Sep-23										
PLANNING		Commentary	Appln No	date applied	date approved	BUILDING CONSENT	date of approval/certification	DEVELOPMENT APPROVAL	date of lodgement	date of approval
Initial Planning Consent	#1	Approved	22017508	26-May-22	14-Sep-22	SEE BELOW		SEE BELOW		
Subsequent Planning Approval Variation Application	#2	to vary conditions and seek approval for changes to plans	23024217	25-Aug-23	13-Sep-23	23024217	18-Sep-23	23024217	25-Sep-23	26-Sep-23

The current planning conditions in relation to tree management state:

With respect to the three (3) significant trees detailed in the Arboricultural Impact Assessment (AIA), dated 20 June 2022, prepared by Urbans Arboriculture, the following measures shall be undertaken in addition to the recommendations contained in the AIA:

- i. Service trenches are to avoid each trees Tree Protection Zone (TPZ) where possible but if not, they are to be installed using boring or hydrovac excavation methods under the supervision of a level 5 arborist.);*
- ii. The paving in the vicinity of Tree 1 be undertaken in accord with amended plan 21-0255- AA1221 dated 13/07/23 and where excavation is required for the excavation of the alignment of the paths and for stormwater or irrigation purposes it be undertaken using boring or hydrovac excavation methods as appropriate under the supervision of a level 5 arborist*
- .iii. Physical tree protection barriers are to be installed with signage for the duration of the works for the full extent of the undisturbed TPZ's (or to the largest extent possible) and not removed without consent of the project arborist*
- iv. Irrigation must not be turned off between the months of October - May as the significant Trees have developed a reliance on irrigation here over time). Alternatively, supplementary irrigation must be established for this period of time (i.e. October - May, warmer months of the year); and*
- v. All pruning should be undertaken by, or in the presence of, a level 5 arborist (project arborist), including root pruning*

Tree 2 is located on the eastern side of the site a few meters from the eastern boundary and approximately in line with half-way between the deep and shallow ends of the existing and future 50m outdoor pools.

It has become apparent that the retention of Tree 2 has a number of impacts which affect the constructability of the facility, structural integrity of the pool long term, ability to achieve positive environmental outcomes through retention of contamination on site, and functionality of the open space areas of the pool for the community. The remaining life of the tree is also a concern for safety, with tree removal also to be highly challenging immediately adjacent the pool within a constrained site.

Collectively these issues create a compelling argument that justifies the need for the removal of this tree under the Planning and Design Code Regulated and Significant Tree Overlay PO 1.4:

A tree-damaging activity in connection with other development satisfies all the following:

- (a) It accommodates the reasonable development of land in accordance with the relevant zone or subzone where such development might not be possible*
- (b) In the case of a significant tree, all reasonable development options and design solutions have been considered to prevent to prevent substantial tree-damaging activity occurring.*

The planning approval which was originally granted in September 2022 and the more recent variation to the planning approval granted in September 2023 both sought to protect the three significant trees on the site. In fact significant work was undertaken to address concerns about the impact of site works and approved paved areas and likely trenching in the vicinity of Tree 1 in the submission for the variation in September 2023, so that Tree 1 could and would be properly protected.

Measures have also been introduced to the construction contract to also control the activities within the TPZ of Tree 3 and mitigate tree damaging activities from happening there.

Significant Tree 2 is the one of current concern and the submission below provides the context and reasoning for the request for approval to remove this tree.

Tree 2

General

The arborist that prepared the attached tree report indicates that Tree 2 *“is a healthy flooded gum but possibly will prove a challenging tree to retain, especially if it shows a tendency to keep growing. It looks to have established an extensive root system in the immediate area. It appears probable that roots are growing in the vicinity of the pool. The tolerance of this tree to localised root disturbance is questionable in my opinion. It looks to have a modest ULE, but at least 10 years.”*

Tree 2 is not a local indigenous or remnant species. It was planted post 1979, as attested by the attached aerial photo of the site from that year and therefore definitely planted during the tenure of the existing pool facility which was built in 1968 and from the evidence of the aerial photography, it is no more than 44 years old.

If developing the site now from scratch without any existing vegetation the selection and location of trees would be made with consideration of several criteria such as location (afternoon shade), eventual size, safety (i.e. limb drop), maintenance (i.e. trimming), amenity, amount of leaf-drop and non-invasive root systems. This tree was not a desirable species for the existing setting when considering the criteria listed above and is not an appropriate tree for retention in a highly used, public space. The initial attempt to retain of Tree 2 has meant significant compromise and/or risk to the project and community in a number of areas.

Proximity to the Pool

The approved 10 lane 50m outside pool is to be constructed generally in the same location as the existing 8 lane pool with the additional 2 lanes being added on the eastern side. This means the new pool and its surrounding concrete concourse will be 5m approx. closer to Tree 2. It will still be outside the SRZ and TPZ but when considering the statement in the Arborists report *“It appears probable that roots are growing in the vicinity of the pool”* it is possible that some roots of the tree will be affected through construction. According to the Arborist, *“The tolerance of this tree to localised root disturbance is questionable in my opinion”*

It is also possible the tree roots have exacerbated cracking causing leakage in the existing pool. It is of some concern that the new pool, with minimum expected useful life of 50 years may be impacted by the root system of Tree 2. Removal and replacement with a more appropriate species will mitigate the risk of damage to the pool and associated pipe networks from the tree root system. It will also mitigate impacts from potential root disturbance leading to issues with the tree in the short to medium term.

The proximity of Tree 2 to the pool is also of concern from a maintenance perspective. Although leaf litter can be managed through increased maintenance, given the opportunity, this tree would not be ideally located adjacent a pool. It is not a defining factor for tree removal but would be a net positive impact should approval be granted for removal of Tree 2.

Tree life

According to the Arborist report, Tree 2 has “a modest ULE, but at least 10 years” and “The tolerance of this tree to localised root disturbance is questionable in my opinion” may mean the tree itself is not expected to have a long-life span when considered in relation to the lifespan of the redeveloped pool facility, which should be more than 50 years. This is especially the case when considering the concern of the arborist regarding Tree 2’s tolerance to some root damaging activity through construction of the new pool.

Safety

Given the useful life of Tree 2 is anticipated to be significantly less than the useful life of the pool, this presents a significant risk of limb drop and failure to the community within the pool grounds. Initial plans were devised to provide some protection to the community through mulching and garden beds around the tree, however this has the effect of dramatically decreasing the useable area for the community to relax and recreate, with no guarantee that these areas are sufficient to ensure the safety of the community.

Removal and Access

Consideration of how the tree would be removed when it reaches end of useful life has identified challenges regarding access. Slides and water play will be constructed to the north, with the pool immediately adjacent to the west limiting access and working areas. There are also facilities and club rooms to the south and the creek/drainage infrastructure to the east. Effectively, limited access will be available through a small and constrained service entrance onto the communal lawn area. This will result in a challenging removal environment risking damage to the pool itself with the lawned area and irrigation requiring replacement as a minimum.

Recreation Area

With the fear for public safety regarding limb drop, significant exclusion zones around Tree 2 were established in the attached landscape plan and the resultant mulched area significantly reduces the lawned area available to the community for recreation and picnic space.

Mulching and exclusion of people from the area is also required as the existing surface roots of Tree 2 are proud of the existing lawn and have been damaged by mowing over the years and are now a tripping hazard in the lawn area and will continue to be an issue.

Tree 2 is also not positioned in such a way as to allow shade from afternoon sun. With the required exclusion zones, the tree will provide little to no shade benefit for the community.

Recent modelling suggests that given the significant improvement in facilities and amenity, patronage will increase from approximately 50,000 users per year to 300,000 users per year. It is expected that through the warmer months when the slides and zero depth play areas are a strong drawcard any lawned area for families and children will be in high demand. The extensive exclusion zones around Tree 2 are now viewed as highly undesirable given the updated modelling for usage of the facility.

Environmental Considerations

Contaminated waste has been identified in the parts of the site and needs to be appropriately dealt with under EPA legislation and guidelines. The appropriate hierarchy of controls from the EPA is to, wherever possible, treat and or contain contaminated material on site through burial and capping. This is in preference to removal, transport, and disposal offsite.

The contaminated material is not able to be placed under buildings or structures as it is uncontrolled fill. As such, the only area potentially available for containment is the area between the outdoor pool and the eastern fence line where the significant tree is located. Should this option become available to explore through tree removal, it will not only provide an environmentally preferred disposal location in accordance with EPA guidelines, it will also potentially provide significant savings to the community through reduced contaminated waste disposal fees.

Constructability

Upon receipt and interrogation of the construction program through tender evaluation, it has been identified that the lack of space available on site is a significant challenge to the efficient construction of this new community facility. Cranes and other heavy equipment will have to operate in the area of the existing 50m pool whilst the buildings are constructed, with very little other site area available for plant, equipment, and work areas. This in turn creates an extended program, resulting in delays to facility opening and additional cost to the community for this project.

The removal of Tree 2 will provide additional area within the site, allowing for exploration of program efficiencies, ease of construction and improved safety of the construction team. Whilst construction can take place with Tree 2 in place, substantial efficiencies and safety improvements could be realised should it be removed.

Safety through line of sight

The new facility has been designed to meet a minimum floor (and pool concourse level to reduce the risk of flood impacts from Third Creek in a 1 in 100-year ARI storm event. This resulted in the building floor levels and pool concourse and corresponding water levels being lifted by approximately 500mm. Whereas the area under the Tree 2 is quite flat with a slight rise of 250mm from the edge of pool to the tree trunk, the new levels mean that the ground to the east beyond the concourse is lower than the pool itself, with a slope slightly down of approx.250mm to the tree and then another 250mm (approx.) to the fence behind.

Such a slope, although slight, will create an environment for parents and carers where surveillance of behaviour and safety in the main pool becomes more restricted. The visual connection to and view of the water will be reduced when further away from the pool, keeping in mind that the lawn areas will be used widely for placement and sitting or lying on of towels, low to the ground. Correspondingly, the passive surveillance of items left on the lawn area will also be reduced for someone in the pool itself.

The removal of Tree 2 will allow for a re-grading of the area to elevate the grassed area and thus improve a parent or caregivers line of sight to those in their care in the main pool.

Outcomes

The removal of Tree 2 would allow for the creation of a safer environment for the community. This would occur through reduced risk of limb drop as well as improved surveillance and monitoring by parents and care givers through re-grading to improve sight lines.

Improved landscaping and grading would allow for the introduction of appropriate shade tree plantings in locations for the best long-term outcome. The amount of lawn area would also be able to be increased thus making best use of the available open space which will be in high demand in summer months.

The removal of the tree would also create more space and remove some of the existing constraints for the contractor to build the new building swimming pools which will allow a better efficiencies and staging/sequencing of the works to save on cost but also time to the benefit of the community.

The potential for improved environmental outcomes with the retention and appropriate storage of contaminated material could then be explored.

The attached plans indicate how landscaping and tree planting is currently proposed, and how it could be undertaken should the Tree 2 be removed. Trees with non-invasive roots would be planted closer to the outdoor pool to provide afternoon shade to the area between the eastern side of the pool concourse and the eastern site boundary which would be planted with lawn to provide as much open and usable space as possible for the patrons.

If the removal of Tree 2 is approved then more detailed landscaping, planting and irrigation plans would be prepared and submitted for consideration and approval prior to any landscape works commencing.

With acknowledgement that the removal of Tree 2 would reduce the amount of tree canopy in the locality in the short to medium term, it is proposed that the project fund the supply and planting of an additional

20 trees in accordance with Councils Tree Canopy Strategy within the locality, to mitigate that immediate effect and increase the tree canopy in the longer term. To be clear this is an undertaking that will be in addition to any existing tree street or open space planting program under the Council's operating budgets. Tree planting will be completed prior to the opening of the facility in 2026.

In Summary

Significant work has been put into ensuring the retention and health of Tree 1 as evidenced by the measures taken recently to change the plans and work methodologies in the Planning Variation in September 2023 and Tree 3 is being protected using appropriate specifications and conditions of contract for the construction contract.

However, it would be safer, more cost effective, more environmentally beneficial, and ultimately of more community benefit to remove Tree 2 now through the construction phase. This would allow for landscaping and tree planting that provides better shade, amenity, safety, and maintenance outcomes that can be more aligned to the life of the pool.

Tree 2:

- Is not a local indigenous species
- Is not a species that is suitable for such a high use area.
- Has issues with exposed roots requiring a landscape design response that impacts access and usage of the area
- Possibly has roots which are already in the vicinity of the existing pool
- Has questionable tolerance to root damaging activities
- Has a questionable useful life
- Requires pruning to maintain some level of safety for pool patrons in the area
- Requires an exclusion zone to be established under a reasonable area of the canopy
- Will be increasingly dangerous as it approaches end of life
- Will be difficult to remove in a constrained site
- Impact on useable green space for the community
- Would continue to offer little shade or protection for patrons at the pool
- Limits the ability to plant more appropriate trees in the vicinity
- Prevents appropriate regrading of the site to improve sight lines to the pool and thus safety for pool users requiring supervision.
- Creates significant construction program limitations
- Prevents exploration of environmental outcomes with contaminated waste storage
-

If Tree 2 were removed:

- There would be no safety risk of falling branches therefore more lawn area and useable space can be created for the public, which is highly desirable for a swimming pool redevelopment and to meet the needs of the expected increase in patrons, post redevelopment.
- There would be the opportunity to for efficient burial and containment of on-site contaminated waste (in accord with approved EPA standards) resulting in less waste being transported offsite and substantial cost savings for the community.
- There would be more space on site able to be used for construction storage and allow more timely and cost-effective staging of works with substantial cost savings for the community.
- Changes in site level in the area east of the pool can be incorporated into the new landscape plan to account for the changes in pool level in relation to the existing open space resulting in improved safety of pool users.
- Additional tree planting is possible in the expanded lawn area in locations which will provide more afternoon shade and amenity for users in the short, medium, and long-term.
- Additional tree planting (twenty new Trees) will be provided within the locality to offset the immediate reduction in canopy cover

- A new landscape plan would be prepared and submitted to incorporate the above design matters.

It is proposed:

1. That the removal of Tree 2 detailed in the Arboricultural Impact Assessment (AIA), dated 20 June 2022, prepared by Urbans Arboriculture be approved as this submission meets the criteria in the Planning and Design Code; Regulated and Significant Tree Overlay PO 1.4 and
2. That the conditions of consent relating to the protection of significant trees on site be amended accordingly to remove any reference to this Tree 2, viz

With respect to the Tree 1 and Tree 3 of the three (3) significant trees detailed in the Arboricultural Impact Assessment (AIA), dated 20 June 2022, prepared by Urbans Arboriculture, the following measures shall be undertaken in addition to the recommendations contained in the AIA regarding those 2 trees:

i. Service trenches are to avoid each tree's Tree Protection Zone (TPZ) where possible but if not, they

are to be installed using boring or hydrovac excavation methods under the supervision of a level 5 arborist.);

ii. The paving in the vicinity of Tree 1 be undertaken in accord with amended plan 21-0255-AA1221

dated 13/07/23 and where excavation is required for the excavation of the alignment of the paths and

for stormwater or irrigation purposes it be undertaken using boring or hydrovac excavation methods

as appropriate under the supervision of a level 5 arborist

.iii. Physical tree protection barriers are to be installed with signage for the duration of the works for the full extent of the undisturbed TPZ's (or to the largest extent possible) and not removed without consent of the project arborist

iv. Irrigation must not be turned off between the months of October - May as the significant Trees have developed a reliance on irrigation here over time). Alternatively, supplementary irrigation must

be established for this period of time (i.e. October - May, warmer months of the year); and

v. All pruning should be undertaken by, or in the presence of, a level 5 arborist (project arborist), including root pruning

3. That a new condition of consent be set that ensures an appropriate landscape plan is provided and approved and that the landscaping is maintained appropriately thereafter, viz

An alternate landscape plan shall be provided to the reasonable satisfaction of the Assessment Manager prior to Landscape works commencing on site showing a suitable mix and density of trees, shrubs and groundcovers and all such plants shall be planted within the next available planting season after the occupation of the premises and thereafter nurtured and maintained in good health and condition at all times, with diseased or dying plants being replaced, to the reasonable satisfaction of the Council or its delegate.

4. That the applicant be held to the undertaking to provide, plant, and maintain twenty additional trees at its cost in all things elsewhere in the locality, over and above any existing tree planting programs, through a new condition, viz

That an additional twenty trees (in addition to any existing or programmed tree plantings) be planted in accordance with Councils Tree Canopy Strategy and accepted arboriculture standards in the locality and those trees be replaced if they fail at any time in the initial 3 years after planting.

AERIAL PHOTOGRAPH OF THE PMSC IN 1979 WHICH DOES NOT SHOW TREE 2 TO THE EAST OF THE MAIN POOL

Aerial Imagery 1979

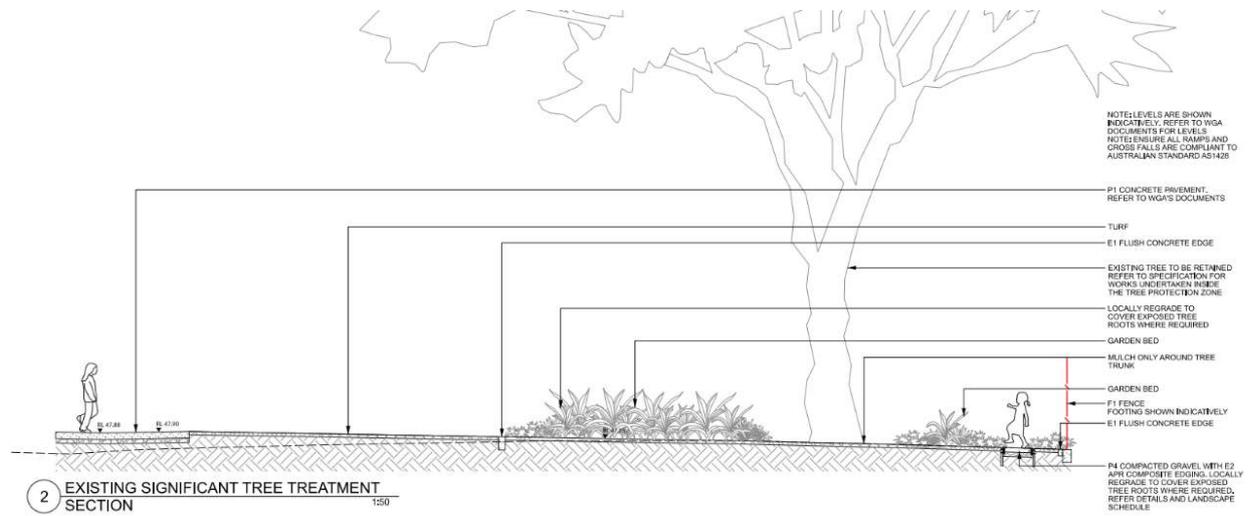
Payneham Memorial Swimming Centre, Felixstow, SA 5070



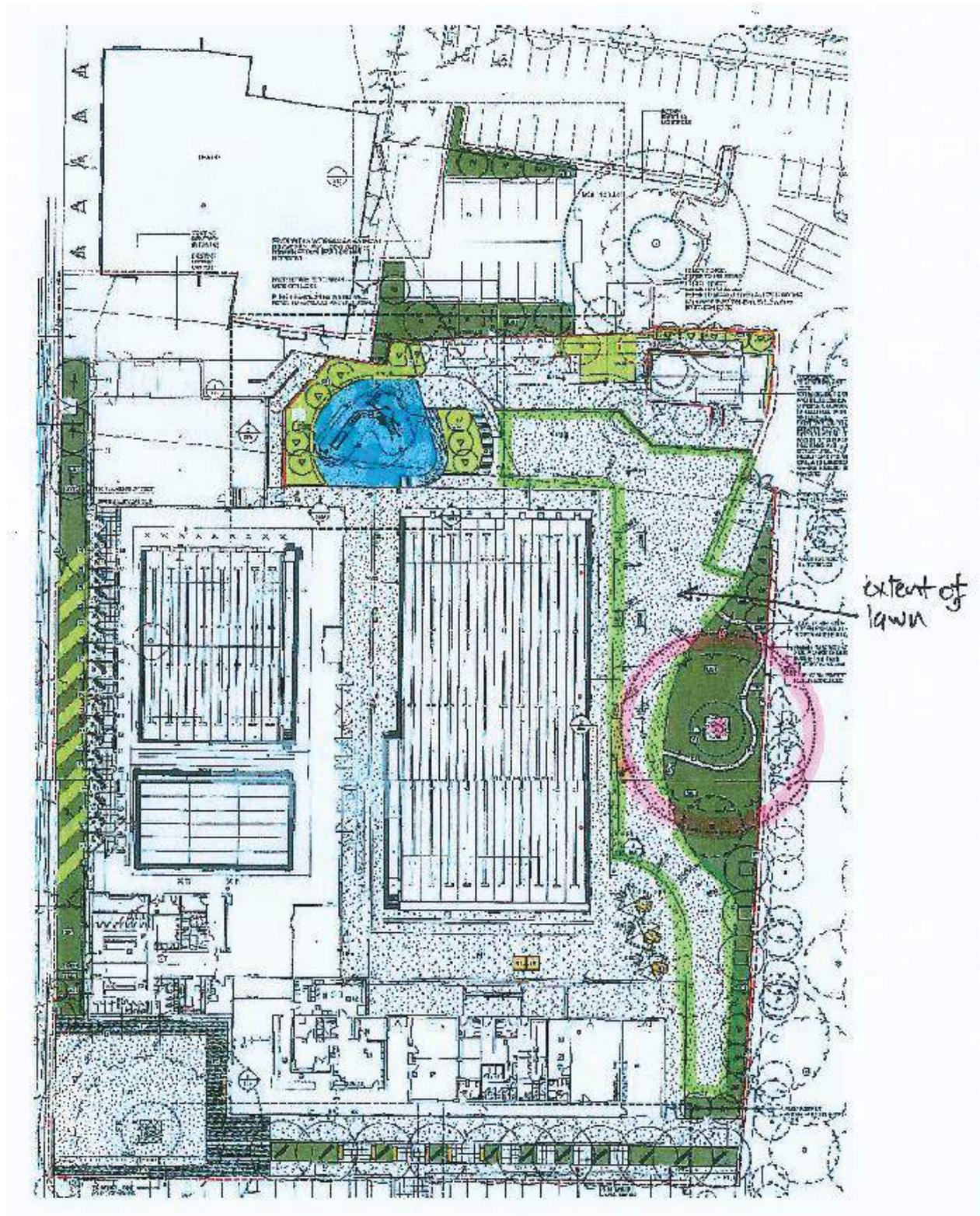
Lotsearch Pty Ltd ABN 89 600 168 019

36

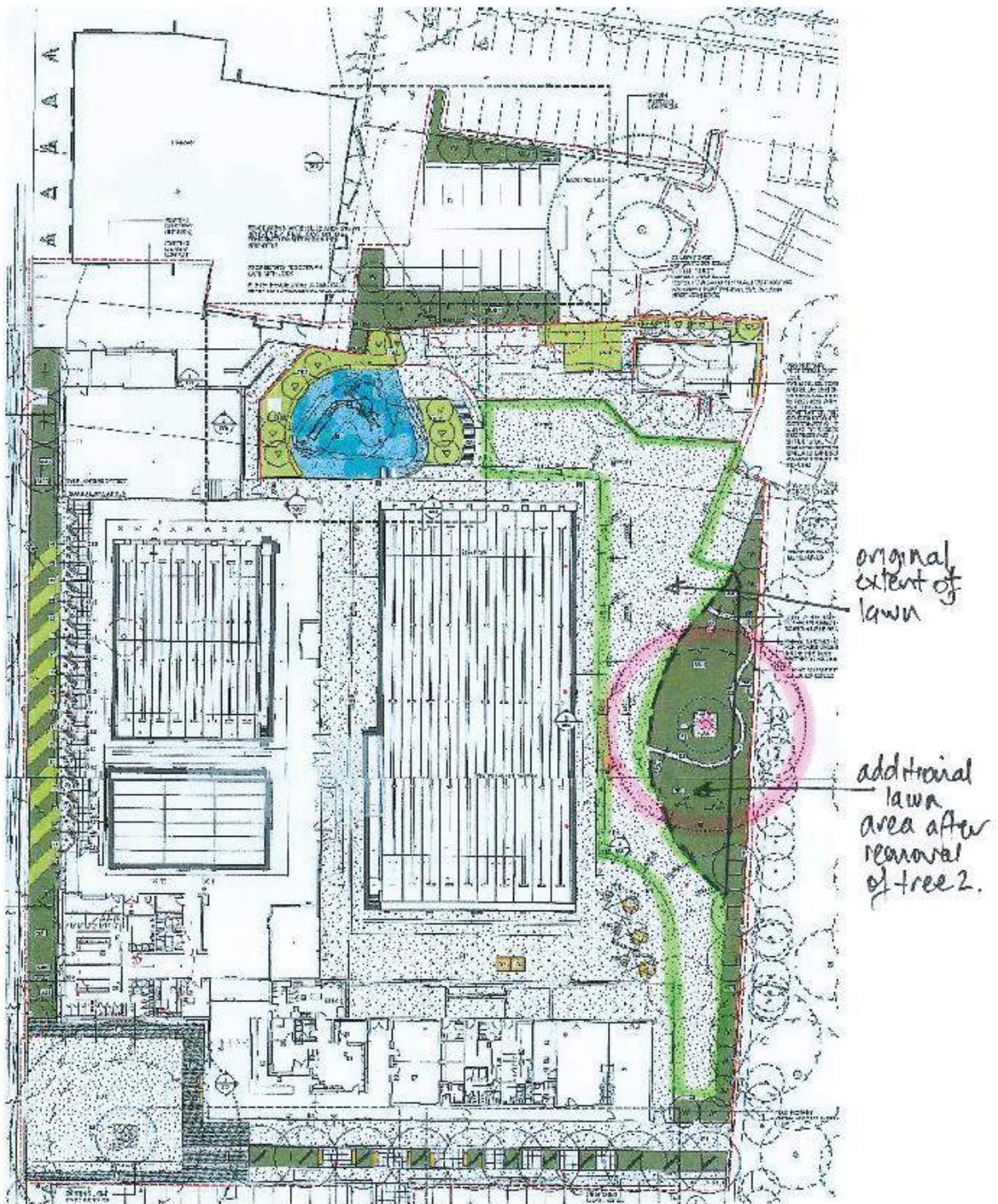
CROSS SECTION OF EASTERN SIDE OF POOL IF TREE 2 IS RETAINED – slope away from pool shown



EXISTING LANDSCAPE PLAN OF THE EASTERN SIDE OF THE OUTDOOR POOL AREA



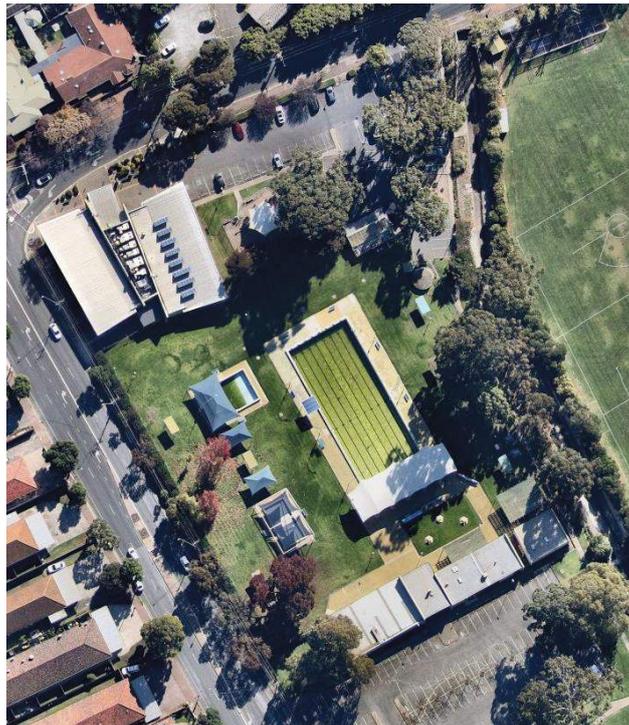
ADDITIONAL LAWN AREA SHOULD TREE 2 BE REMOVED





Arboricultural Impact Assessment

Site: Payneham Swimming Centre
OG Road Felixstow



Prepared for: Richard Wunderlich
City of Norwood, Payneham & St Peters
Urbanvirons ref: 50466
20/6/2022



City of Norwood, Payneham & St Peters:
Payneham Swimming Centre Development

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Tree assessments and report by:

Dr Martin Ely PhD
Registered Landscape Architect (AILA)
Dip.Hort.(Arboriculture)

assisted by

Ross Greene
B.App.Sc.(Horticulture)
Dip.Hort.(Arboriculture)



1. Introduction

Urbanvirons was commissioned by Richard Wunderlich of the City of Norwood, Payneham & St Peters to prepare a report on three regulated trees located at the Payneham Swimming Centre. Plans have been prepared to redevelop the existing centre and the retention of the three trees is proposed. Development activities of various levels are to occur adjacent to the trees. Council has requested a report on potential impacts to the trees and to provide guidance as to how these impacts might be minimised.

The objective of this report is to:

- determine the regulated status of the trees under SA legislation.
- establish the likelihood of retaining each tree given the layout of the planned development utilising specifications and recommendations within *Australian Standard 4970-2009 Protection of trees on development sites*.
- recommend remediating measures where appropriate.

2. Method

The following activities were undertaken to complete the report:

- A site visit was undertaken on the 14th of June 2022 to inspect the trees.
- The trunks were measured to establish legislated status and protection zone radii in accordance with AS4970. The dot point at the centre of each trunk (Centre of Stem) is used to measure the protection zone radii.
- Encroachments into the protection zones were used to assess the potential level of impact that each tree will be exposed to (as per AS4970). The nature of the encroachments was also considered.
- Recommendations determined for measures to mitigate impacts caused by the implementation of the development.

3. Relevant Documentation

The City of NP&SP provided the following document:

- *Payneham Pool Redevelopment Planning Application drawings by DWP dated 18/5/2022.*

Civil drawings were not available at the time of the assessment.

The following legislation, associated planning provisions and Australian Standard were referenced during the preparation of this report:

- South Australian Planning, Development and Infrastructure Act 2016
- South Australian Planning, Development and Infrastructure Regulations 2017
- South Australian Planning and Design Code
- Australian Standard 4970-2009 Protection of trees on development sites



*City of Norwood, Payneham & St Peters:
Payneham Swimming Centre Development*

4. Tree Locations





City of Norwood, Payneham & St Peters:
Payneham Swimming Centre Development

5. Tree Data

Tree 1

Species	<i>Eucalyptus camaldulensis</i>		
Common name	River red gum		
Trunk circum. @ 1m	4.2m		
Legislated status	Significant		
Estimated size	Height	27m	
	Width	N/S 20m x E/W 19m	
Estimated age	60+ yrs		
Estimated useful life	20+ yrs		
Immediate Environment	Growing in a maintained lawn area 3.3m from the nearest site building. The area of crown overhanging the building has been managed with pruning but is still 8m+. The car park is 4.6m from the tree at its closest point. Overhang of car parking to the south is confined to 2-3 parks and has also been regularly reduced. The lawn is in good condition indicating a regular supply of water, and the tree presents as having grown with strong vigour as a result.		
Health	Good – presents as a healthy river red gum based on crown density, leaf condition and evidence of occlusive growth over wounds. It is likely able to experience some root disturbance and remain in good condition.		
Structure	Fair – a large tree that shows indicators of fast growth. The white lower bark and crown density support this assertion. There is very little root flare at the trunk/ground interface. There could be various explanations but the trunk presents as well attached to the ground. The major branch attachments look sound. There is some horizontal branch orientation. Hollowing of trunk areas is obvious. Some branch failures have occurred, with at least two of significant size. The tree appears to be popular with parrots that have been tearing at bark and contributed to hollow formation. There is a good supply of pruning points to help manage the crown going forward.		

Tree 2

Species	<i>Eucalyptus grandis</i>		
Common name	Flooded/rose gum		
Trunk circum. @ 1m	3.5m		
Legislated status	Significant		
Estimated size	Height	30m+	
	Width	N/S 22m x E/W 21m	
Estimated age	60+ yrs		
Estimated useful life	10+ yrs		
Immediate Environment	Growing in a maintained lawn area. The local conditions would support the water requirement of this species. No buildings in the vicinity. Main crown overhang is of public space within the pool compound. There is a low-use footpath to the east outside of the compound. The large pool is approx. 21m west.		
Health	Good – presents as a healthy flooded gum based on crown density, leaf condition and occlusive growth over wounds. Hollowing of trunk areas is obvious. There are some brown striations on the lower trunk which may be a low-level infection but this is very localised and likely recoverable. Regular skimming of large surface roots with a mower doesn't appear to be causing any major health impacts.		
Structure	Fair – typical of the species, a tall form with a strong central leading trunk. The central leader divides at about 20m but the emergent stems remain ascending. Branch attachments look well-formed. There is very little horizontal branch orientation but a few branches are starting to extend. Hollowing of trunk areas is obvious. The tree appears to be popular with parrots that have been tearing at bark and contributed to hollow formation. There are large, above-ground surface roots extending from the trunk base to the east and west. Those to the west extend for up to 11m.		



City of Norwood, Payneham & St Peters:
Payneham Swimming Centre Development

Tree 3

Species	<i>Eucalyptus grandis</i>		
Common name	Flooded/rose gum		
Trunk circum. @ 1m	3.3m		
Legislated status	Significant		
Estimated size	Height	30m+	
	Width	N/S 20m x E/W 22m	
Estimated age	60+ yrs		
Estimated useful life	10+ yrs		
Immediate Environment	Growing in a maintained lawn area adjacent to car parking. The hard surfacing within the car park is permeable near to the tree. The local conditions would support the water requirement of this species. The only building in the vicinity is a plant room approx. 13m to the south, near the crown perimeter. A playground sits partially under the perimeter of the western crown.		
Health	Good – presents as a healthy flooded gum based on crown density, leaf condition and occlusive growth over wounds. Bark is in good condition throughout. The ground below the car park would be compacted to some degree but no major health impacts observed.		
Structure	Fair – typical of the species, a tall form but with multiple leading trunks that form between the 4 & 8m points. Branch attachments look well-formed. There is some branch orientation towards horizontal and few branches are starting to extend. Not hollowed or damaged by birds to the extent of Tree 2. Undulation of the permeable hard surfacing adjacent to the tree indicates the presence of large surface roots within the parking area.		

Relevant Characteristics of the Species

Tree 1 *Eucalyptus camaldulensis*

Eucalyptus camaldulensis (river red gum) is a well-known native tree with a wide-spread distribution in south-eastern Australia. It grows large and naturally wide, often seen as wide as it is high. It is a hardy tree reputed to have an extensive and deep root system which can exploit underground water sources. In habitat it is a tree of riverine or seasonally inundated sites and is recognised as having a high habitat value for native fauna. It is also a species recognised as having a good tolerance to root disturbance and copes well with challenging growing conditions.

Trees 2 & 3 *Eucalyptus grandis*

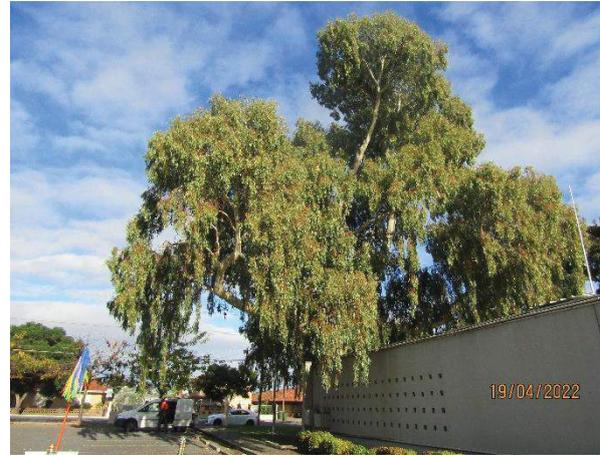
Trees 2 & 3 are mature specimens of *Eucalyptus grandis* (flooded gum or rose gum) a tall forest tree from the high rainfall coastal belt of eastern Australia. In habitat it can growing 50m+. It is usually seen with an ascending, almost excurrent form, with a single leading trunk and angled lateral branches. Where water is in good supply it grows very quickly. Its aesthetic can reduce during drought conditions. It was once often planted as a shade tree for parks. It is not generally suited to confined spaces such as small suburban gardens and is rarely seen for sale nowadays. The species is relatively shallow rooted and when grown in lawn areas it tends to develop substantial surface roots which later present turf management problems and potential trip hazards. Typical of numerous types of gums, large mature trees can be difficult to reduce in size with any degree of subtlety.



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Tree 1. The new building is moving further from the tree. A small new encroachment to the north.



Tree 1. Some crown lifting may be required to complete the build but pruning points are available.



Tree 2. Large, exposed surface roots present as a trip hazard.



Tree 2. They extend up to 11m from the trunk. A low-rise lawned mound or decking present as options.



Tree 3. The lawn area is being reduced to be replaced with car parking. The loss of the only open ground within the TPZ may affect the tree.



Tree 3. Permeable paving can minimise impacts.



6. Proposed Development

The proposed upgrade includes the following. Measurements are taken from Centre of Stem.

Tree1

- Demolition of existing building located approx. 3.9m from the tree.
- New building located approx. 9.6m (east) and 11.9m (north) from the tree.
- New paving located approx. 5.1m (east) and 6.1m (north) from the tree.
- Canopy over eastern section of paving.

Tree 2

- Demolition of existing in-ground pool located approx. 21m from the tree.
- Demolition of existing paving (pool coping and surrounds) located approx. 17m from the tree.
- New in-ground pool located approx. 17m from the tree.
- New paved concourse located approx. 15m from the tree.
- New fenced water slide area located approx. 14m (south) from the tree.

Tree3

- Demolition of existing playground located approx. 7m from the tree.
- Demolition of existing plant room located approx. 13m from the tree.
- New paved car park approx. 4.0m from the tree.

Information was not available on any changes in site levels such as excavation or filling or any trenching for the installation of underground services.

7. Tree Protection Zones

All parts of a tree, including its root system, trunk and crown, may be damaged by development and construction activities if tree protection measures are not implemented. Damage to any one part of the tree may affect its functioning as a whole.

Under AS4970-2009 the Tree Protection Zone (TPZ) is the principal means of protecting trees on development sites. The TPZ is a combination of the root area and crown area requiring protection. It is an area isolated from construction disturbance so that the tree remains viable. The radius of a tree's TPZ is calculated by multiplying its DBH (Diameter at Breast Height) by 12. The TPZ is to be observed in a symmetrical manner with the tree being in a central position and is measured from the centre of the stem at ground level. AS4970 prescribes that a TPZ should not be less than 2m nor greater than 15m (except where crown protection is required).

The TPZ also incorporates the Structural Root Zone (SRZ) which comprises the area around the base of a tree required for its in-ground stability. An indicative SRZ radius can be determined from the trunk diameter measured immediately above the root buttress using the formula provided in AS4970. Given the root system is below ground, the calculation is indicative and generalised. Root investigation may provide more information on the extent of a root system.



Table 1 illustrates the TPZ and SRZ for the trees surveyed. This information is also presented in the TPZ plans that follow.

Table 1: Tree Protection Zones

Tree No.	Species	TPZ (radius m)	TPZ (area m ²)	Diam. at base (mm)	SRZ (radius m)
1	<i>Eucalyptus camaldulensis</i>	15.0	707	1460	3.90
2	<i>Eucalyptus grandis</i>	12.80	515	1260	3.60
3	<i>Eucalyptus grandis</i>	12.24	470	1220	3.60

8. Development Impacts

The following assessment was made of the encroachments by the existing and proposed development on the trees.

Tree 1

Existing TPZ Occupancy

- The existing building occupies approx. **136m² (19%)** of the TPZ. This has been established for a long period of time and the tree will have adapted to its presence.
- ‘Like for like’ development on the footprint of the existing building (to be demolished) would not be considered to constitute a new encroachment provided the demolition is completed with care.
- The existing bitumen car park occupies approx. **220m² (31%)** of the TPZ. This has been established for a long period of time and the tree will have adapted to its presence.
- The remainder of the TPZ is of a relatively open character.

New Encroachments

- The new building (excluding the area on the footprint of the existing building) occupies approx. **39m² (5.5%)** of the TPZ.
- The new paving (excluding the area on the footprint of the existing building) occupies approx. **125m² (17.7%)** of the TPZ.

This results in a total encroachment of approx. **164m² (23.2%)**. The encroachment is outside of the SRZ indicating that impacts on tree health are possible, but tree stability is unlikely to be compromised. Consideration should be given to mitigating this encroachment using ‘tree sensitive’ construction methods such as permeable paving installed above grade.

The re-location of the new building suggests that crown lifting may not be required to accommodate the build. The tree will tolerate pruning if required. This should be to the minimal necessary and comply with AS4373.



Tree 2

Existing TPZ Occupancy

- The existing pathway adjacent to the Third Creek culvert occupies approx. **25m² (5%)** of the TPZ. This has been established for a long period of time and the tree will have adapted to its presence. The tree is likely to have benefited from access to additional water resources from leakage from the culvert.
- The existing in-ground pool and paving are located outside the TPZ. The remainder of the TPZ is of a relatively open character without significant structures or sealed surfaces.

New Encroachments

- The new in ground pool, paving and water slide area are located outside the TPZ with no new encroachment.

The proposed development in its current form is considered to be acceptable in relation to this tree. A number of strategies could be considered in relation to management of the exposed roots.

Tree 3

Existing TPZ Occupancy

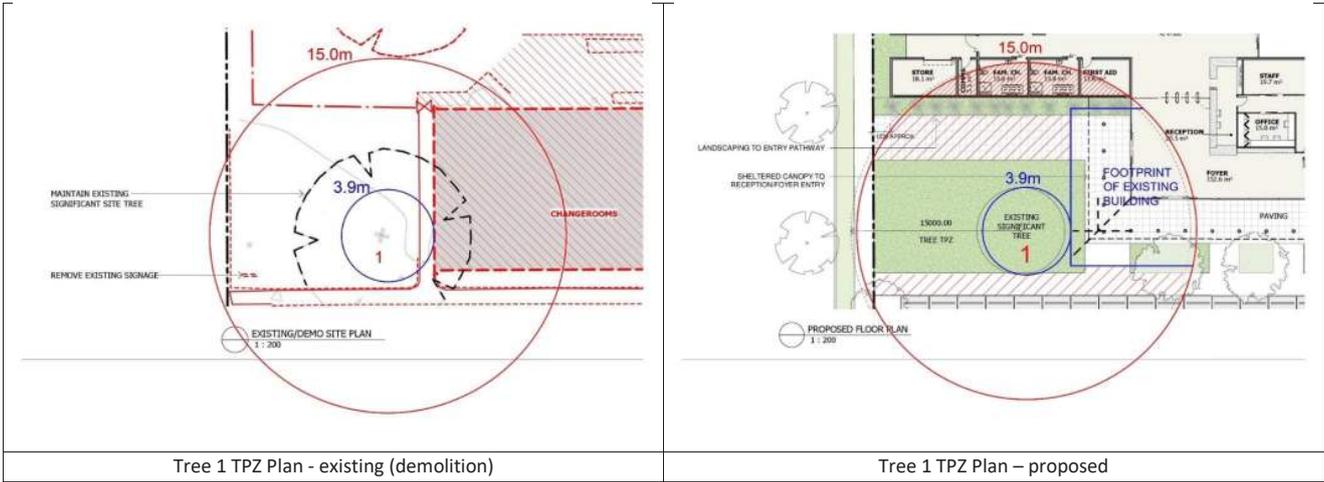
- The existing building occupies approx. **190m² (19%)** of the TPZ. This has been established for a long period of time and the tree appears to have adapted to its presence. Part of this car park comprises permeable paving, which will have mitigated impacts on the tree's root system to some extent.
- The existing playground also occupies a small part of the perimeter of the TPZ (**<5%**). The remainder of the TPZ is of a relatively open grassed character.

New Encroachments

- The new sealed car park occupies approx. **110m² (23.4%)** of the TPZ. This constitutes a major encroachment under AS4970 (>10% of TPZ). This indicates that impacts on tree health are possible, but being outside of the SRZ tree stability is unlikely to be compromised.
- Consideration should be given to mitigating this encroachment using 'tree sensitive' construction methods such as permeable paving installed above grade.

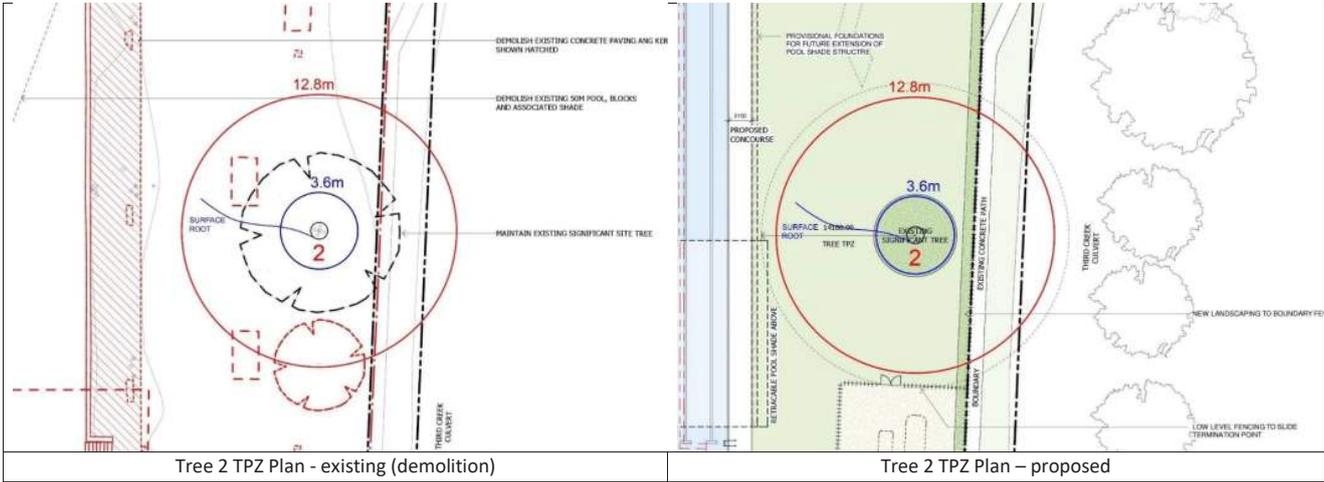


Tree 1





Tree 2





Tree 3





9. Discussion

Tree 1

For Tree 1 there is a total encroachment of approx. **164m² (23.2%)**. This constitutes a major encroachment under AS4970 (>10% of the TPZ) suggesting impacts are possible and that relevant factors listed in Clause 3.3.4 should be addressed.

In this case the following are relevant:

(b) The potential loss of root mass resulting from the encroachment: number and size of roots

It is evident that reducing the encroachment of the built form has the potential to benefit the tree.

(c) Tree species and tolerance to root disturbance

It is recognised by many arborists and scientists that *E. camaldulensis* is a tree species with a good tolerance to development activities. This is due to its relatively deep root system, ability of its dimorphic root system to draw on underground water sources, and natural adaptation to disturbed riverine sites. 'Dimorphic' refers to the dual root structure of the tree. The surface root system colonises shallow soil layers to access moisture and nutrients, and to aid tree stability. Vertical (sinker) roots develop from the lateral roots and grow vertically down to the water table, providing a more secure moisture source in times of drought. These roots also provide additional anchorage for tree stability.

(d) Age, vigour and health of the tree

This is a mature tree showing good health and vigour. It presents as being able to cope with the degree of root disturbance likely to be caused by the development provided care is taken during the demolition.

(g) The presence of existing or past structures or obstacles affecting root growth

It is likely that the most important roots for tree health and stability are not located under the *in situ* building.

(h) Design factors

Hard paving within a TPZ can impact on tree health by installing impervious surfaces, and by any required excavation works. Paving within the TPZ is recommended to comprise open jointed pavers or a permeable paving system to maintain water infiltration into the soil. If possible paving within the TPZ should be installed without lowering of grade to reduce the need for excavation.



Tree 2

For Tree 2 there is no new encroachment and the proposed development is considered to be acceptable in relation to this tree. Demolition machinery should be positioned outside of the TPZ unless where absolutely necessary. This machinery should not traverse the exposed surface roots without root protection.

The main issue with use of the space appears to be the trip hazard of the large surface roots extending for 11m towards the main pool. A number of strategies could be considered in relation to management of the exposed roots. These include.

- a mulched garden bed around the tree.
- mounding the area with loam fill around the tree roots and installing lawn. The edge could either taper down or be constructed with a low retaining wall also used for seating.
- a raised timber deck on isolated pier footings around the tree.

Reducing these roots further through grinding or removing them is not recommended.

Tree 3

For Tree 3 reducing the open lawn area is proposed and there is an encroachment of new paving of approx. **110m² (23.4%)**. This constitutes a major encroachment under AS4970 (>10% of the TPZ) suggesting impacts are possible and that relevant factors listed in Clause 3.3.4 should be addressed.

In this case the following are relevant:

(b) The potential loss of root mass resulting from the encroachment: number and size of roots

It is evident that the new encroachment has the potential to affect the health of this tree if roots are cut to facilitate the installation of hard surfacing. Removing roots restricts water uptake which is critical to this species remaining in good health.

(c) Tree species and tolerance to root disturbance

Eucalyptus grandis is considered to have a moderate tolerance of development activities, partly due to its relatively shallow rooting habit.

(d) Age, vigour and health of the tree

This is a mature tree showing good health and vigour. It presents as being able to cope with some degree of root disturbance however reducing the encroachment would be a preferable outcome. It should be acknowledged that trees of this size and age do drop branches, and that to some extent installing car parks directly under the crown is installing some degree of risk for damage.

(e) Lean and stability of the tree

There is no lean or likely stability issue. Cutting roots is unlikely to destabilise the entire tree but could cause defoliation and/or dieback. Cutting roots near the SRZ on a 30m tree is generally inadvisable however.



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(g) The presence of existing or past structures or obstacles affecting root growth

Re-locating the pool plant further from the tree and retaining as open ground may be of some benefit given the root system is liable to extend beyond the perimeter of the crown.

(h) Design factors

Reducing the car park area would reduce the encroachment and would be a better outcome for the tree. Reducing by 2 spaces would reduce the encroachment by 12-13% with the residual encroachment approaching the 10% recommended as the maximum permissible within AS4970. Installing the car park without excavating would also likely reduce the impact. Site levels suggest this may be possible.

10. Conclusions and Recommendations

Tree 1

- The proposed development is considered to be acceptable in relation to this tree.
- The use of permeable paving for the new footpath is recommended to minimise impacts.

Tree 2

- The proposed development is considered to be acceptable in relation to this tree.
- The main risk for impacting this tree appears to be due to demolition. Machinery should avoid activity within the TPZ and traversing over surface roots wherever possible.
- Remediating the potential trip hazard of the surface roots is recommended for consideration.

Tree 3

- The proposed development may negatively impact this tree. This is due to the removal of open ground within the TPZ and the installation of hard surfacing. This constitutes a new encroachment of approx. 23.4%.

Impacts could be minimised by:

- Reducing the area of car parking within the TPZ. A reduction of 2 parks would reduce the encroachment closer to the 10% limit recommended by AS4970. A reduction of 4 parks would further reduce any potential impacts.
- Avoiding excavation to install hard surfacing. Installing at or above grade will minimise damage to surface roots.
- Using permeable pavers for the parking area.



Appendix – General tree protection measures

Protective measures may be beneficial to site trees during demolition and construction activities. In relation to the proposed development at this site the following general guidelines are provided.

Protective fencing

- Protective TPZ fencing is recommended around trees in close proximity to development activities.
- Ideally the TPZ fence should be set up at the standard TPZ radius. Where this is not practical the TPZ fence may be reduced but should be maintained to as large an extent as possible. A range of other ground and tree protection measures may be required in some situations.
- The fencing should be secured to restrict access. Appropriate signage is recommended to be placed on the TPZ fence.
- The fenced area shall not be used for storage of machinery or construction materials. The fenced area shall not be used for parking or vehicle access.
- Fencing can be removed to facilitate final landscaping.

Site access

- Site access should be directed around any tree protection zones.

Trunk and branch protection

- Where works are in close proximity to trees and impact by machinery is likely, trunk and branch protection can be utilised. Soft padding and timber battens can be installed around trunks and branches to avoid wounding.

Demolition

- Protective fencing is to be established prior to demolition works. Demolition works must proceed with caution within and adjacent to the TPZ. Demolition machinery must work with caution removing material in a retreating fashion away from the tree. A spotter should be employed when large machinery is working in close proximity to regulated trees.

Associated activities

- Areas for parking, storage, waste disposal, mixing and wash out areas must be clearly defined, and well away from tree protection zones.

Underground services

- No underground services should be installed within any TPZ. If underground services must pass through any TPZ they must be installed with a low impact method. This may require directional boring or hydro excavation.

Paving

- Paving materials located within a TPZ must use permeable base preparations and permeable paving materials.

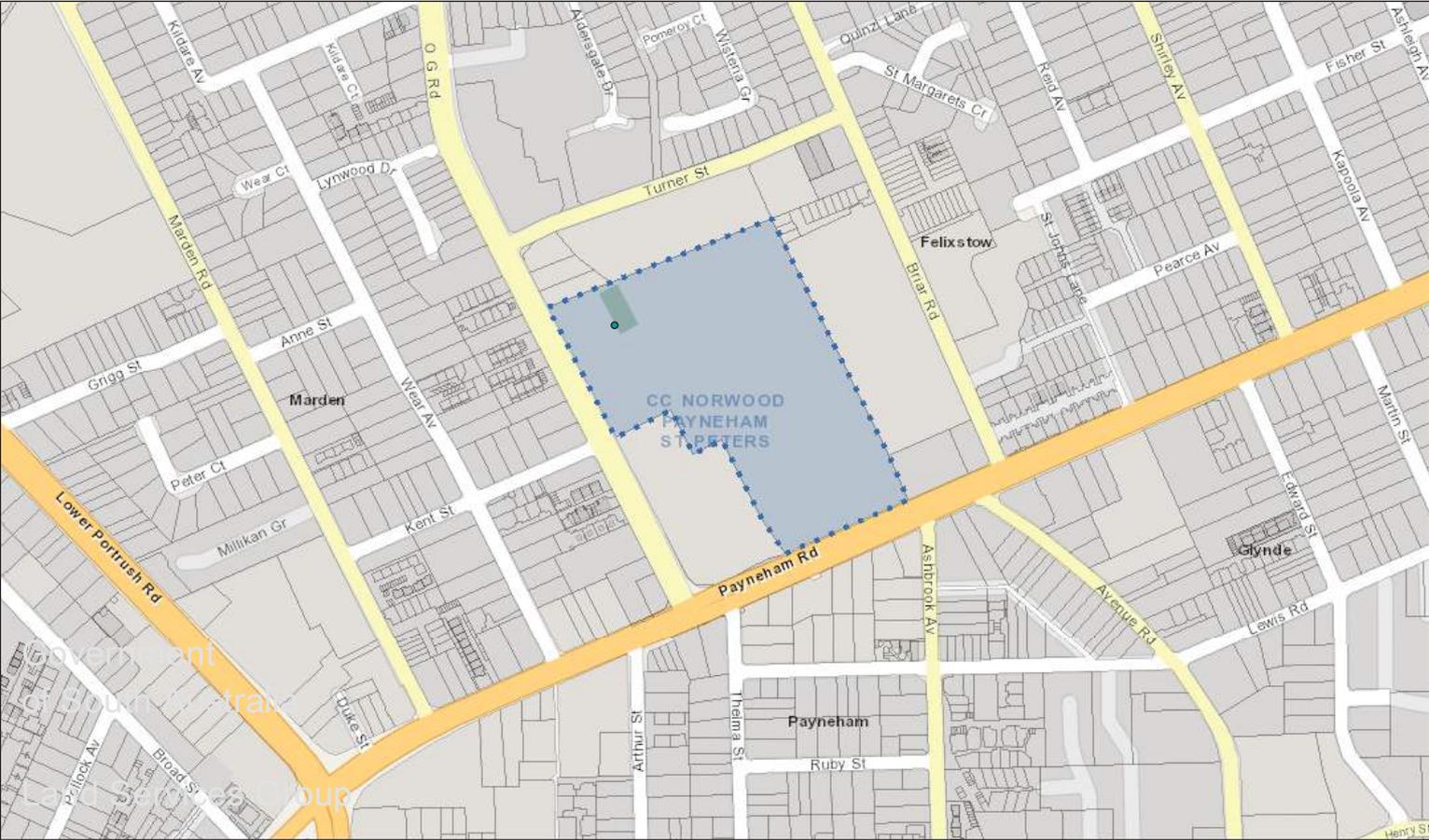
Pruning

- Any pruning of regulated/significant trees is to be completed by Level 3 (minimum) qualified arborists observing the specifications of AS4373.

SAPPA Report

The SA Property and Planning Atlas is available on the Plan SA website: <https://sappa.plan.sa.gov.au>

Subject Land Map



Disclaimer: The information provided above, is not represented to be accurate, current or complete at the time of printing this report. The Government of South Australia accepts no liability for the use of this data, or any reliance placed on it.

SAPPA Report

The SA Property and Planning Atlas is available on the Plan SA website: <https://sappa.plan.sa.gov.au>

Development Site Map



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Kieran Fairbrother

From: Jared Barnes
Sent: Monday, 29 January 2024 12:17 PM
To: Kieran Fairbrother
Cc: Geoff Parsons; Peter Wellington; Derek Langman
Subject: RE: Planning Application for Variation to Planning Approval to remove Significant Tree #2 - Payneham Memorial Swimming Centre
Attachments: RE: Planning Application for Variation to Planning Approval to remove Significant Tree #2 - Payneham Memorial Swimming Centre - Question 5 Contamination Disposal Costs
Follow Up Flag: Follow up
Flag Status: Flagged

Hi Keiran

Below are our responses to your questions ([which are shown in blue](#)).

1. In your supporting statement (attached), on page 2 and throughout, you quote comments from the arborist you engaged for this project. However, I cannot see those words in the arborist report provided with this application. Do you have another report/correspondence in which these statements are made, and if so can you please provide these? (This is important because there are comments here about the tree being difficult to retain and roots growing in the vicinity of the pool etc)

The following statements are extracted from the reports prepared by Urbans Arboriculture ([find copies of the reports here](#)), noting the added highlights are mine.

- **Tree Report** dated 29/4/2022:

(Tree Assessment and Recommendations – Page 8):

Tree 2

General

Visually a healthy tree generally of fair structure. At an estimated 30+ metres high, **it has grown to a large size for the environment, being a public space**. The species can grow large where water is available, with heights of 50m reported. It lacks a lignotuber which suggests biologically its strategy is **not geared to longevity**. The flooded gum is **not a tree that usually grows with a form that facilitates subtle pruning cuts**. The most obvious lower cut is testament to this.

One of the more noticeable characteristics of this tree is the activity of **shallow surface roots**. Most appear to have been historically mown over. Recent damage appears modest. **Not many options for maintenance here. Wounding roots can provide an opportunity for disease, or may have done so**. The root activity of this tree looks to extend further than the indicative calculated SRZ (based on AS4970). No branch failures of significant size were observed. Some may have occurred along the trunk at some point in the regions of the hollows.

I would conclude that the tree is a healthy flooded gum but **possibly will prove a challenging tree to retain**, especially if it shows a tendency to keep growing. It looks to have established an extensive root system in the immediate area. It appears **probable that roots are growing in the vicinity of the pool**. The **tolerance of this tree to localised root disturbance is questionable** in my opinion. It looks to have a **modest ULE, but at least 10 years**.

- **Arboriculture Impact Assessment** dated 20/6/2022:

(Relevant Characteristics of the Species – Page 6):

Trees 2 & 3 *Eucalyptus grandis*

Trees 2 & 3 are mature specimens of *Eucalyptus grandis* (flooded gum or rose gum) a tall forest tree from the high rainfall coastal belt of eastern Australia. In habitat it can growing 50m+. It is usually seen with an ascending, almost excurrent form, with a single leading trunk and angled lateral branches. **Where water is in good supply it grows very quickly.** Its aesthetic can reduce during drought conditions. It was once often planted as a shade tree for parks. It is not generally suited to confined spaces such as small suburban gardens and is rarely seen for sale nowadays. **The species is relatively shallow rooted and when grown in lawn areas it tends to develop substantial surface roots which later present turf management problems and potential trip hazards.** Typical of numerous types of gums, large mature trees can be difficult to reduce in size with any degree of subtlety.

(Discussion – Page 15):

Tree 2

For Tree 2 there is no new encroachment and the proposed development is considered to be acceptable in relation to this tree. Demolition machinery should be positioned outside of the TPZ unless where absolutely necessary. This machinery should not traverse the exposed surface roots without root protection.

The main issue with use of the space appears to be the trip hazard of the large surface roots extending for 11m towards the main pool. A number of strategies could be considered in relation to management of the exposed roots. These include:

- a mulched garden bed around the tree.
- mounding the area with loam fill around the tree roots and installing lawn. The edge could either taper down or be constructed with a low retaining wall also used for seating.
- a raised timber deck on isolated pier footings around the tree.

Reducing these roots further through grinding or removing them is not recommended.

2. Do you have any evidence to substantiate the suggestion that roots from this tree may have caused or contributed to cracking causing leakage in the existing pool, per page 2 of your supporting statement?

The 50m pool at the Payneham Memorial Swimming Centre has experienced significant water loss in recent years due to leakage from suspected cracks in the structure which are likely to be a result of tree root penetration and the standard of construction back in 1968. Once the cracks occurred, the leaking water would have provided a regular water source beneath and/or adjacent the pool structure. Tree roots will grow where the soil environment is favourable, and it is suspected that tree roots have found the leaking water source and are growing around and beneath the pool and within the cracks. There is no direct visual evidence of tree roots as we haven't undertaken any destructive investigations, but the statement of the arborist above that "It appears probable that roots are growing in the vicinity of the pool" indicates to us that this is possible.

The Norwood Pool was built in a similar era and has experienced significant leaks contributed to by tree roots, which substantiates the concerns about tree roots at the Payneham Pool. The contribution of significant gum tree roots to the leaks at the Norwood Pool was confirmed by CCTV and destructive inspections, and resulted in a significant temporary repair to be able to open the pool for the current swimming season. Below are statements taken from the Engineers' Investigation Report for the Norwood Pool:

- S23_049_Norwood Pool Leaking Investigation DRAFT - 3 July 2023
()

4.1 In MLEI's opinion, the concrete shell of the 50m pool was seen to have two significant cracks and a number of potential other cracks witnessed throughout the pool walls, (P004, P005). for the causes of the **cracks appear to be a combination of tree root penetration and poor workmanship** from historical remedial joint repairs s Poor workmanship typically results in air pockets or hidden voids that will eventually compromise the pool's structure.

4.2 As stated above a **primary reason for cracking is the tree root penetration through the concrete.** During the dry season when the soil moisture level is lowered and subsequently the soil contracts which results in shrinkage, tree roots will look for a water source in their surrounding environment. This shrinkage results in movement of underground soil, and the neighbouring concrete wall/foundation is disturbed. **Tree root penetration will quickly exacerbate any leaks within the pool shell as moisture will remain constant in these areas**

and as witnessed on this pool as soon as the roots have made their way through the shell will swell and cause further cracking. **Tree roots were witnessed coming through the significant cracks, and throughout the pool SWR troughs.**

4.3 Pool shell penetrations where lights have been installed have deteriorated and leaked. this has been witnessed in the light well pits behind the pool wall where moisture and **tree roots were witnessed.** Pits number 3, 17 and 19 (P007) clearly show the tree roots inside the pits. Further to this there is clear evidence of the pits holding water within pits 2,4,5,6,12,13,2 and 22 (P007,008). The pits are meant to dry and waterproof but the presence of water indicates seepage of swimming pool water into these pits.

4.9 Although not directly related to the issue with the water loss there are blockages in the gutters at the pool water level (P017). This is due to the **proximity of numerous Eucalyptus trees which surround the pool (P018), providing an abundant number of leaves to the pool.** Blocked gutters can prevent debris, leaves, and other foreign materials from being properly filtered out of the pool water. As a result, these contaminants can accumulate in the pool, leading to poor water quality. This can affect the pool's appearance, creating an unhygienic swimming environment, and potentially require additional chemical treatments to restore water balance (P016).

- Also, you can refer to *NORWOOD SWIMMING CENTRE – CCTV* () showing fine tree roots in the Norwood Pool pipe network.
 - a. And as a subsidiary to this, has there been any consideration given to a root barrier being constructed around the new swimming pool to mitigate this in the future?

Consideration has been given to a root barrier around the new pool which can be effective to a depth of 1.2 metres. However, if the tree roots grow deeper than 1.2 metres, they will be able to travel beneath the barrier and behind the barrier.

Also, the new 50m pool will be 10 lanes (wider than the existing by 2 lanes), expanding to the east and closer to Tree 2 by approximately 5m. This means that any existing tree roots that are already in the vicinity will be in closer proximity to the new pool in the future.

3. Do you have any evidence from your arborist to substantiate the suggestion that the safety risk attributable to the tree will increase in 10 years' time (per page 3 of your supporting statement)?

On page 8 of the *Tree Report*, the arborist has stated that the Tree 2 has “a modest ULE, but at least 10 years”. The Arborist continues (noting highlights again are mine):

“Whether pruning can reduce the risk of branch failure in a tree like this is not certain, but the damage to the union near Hollow 3 warrants intervention. It appears that other collar fails have occurred, and it is possible to probable that union damage was involved in these. The branch shown in Appendix C Photo 8 is the largest and most extended in the tree. Reduction looks challenging but based on its extension over a public area an attempt must be recommended. Best cut options for a climbing arborist.”

While the arborist hasn't provided evidence to substantiate an increased safety risk beyond 10 years, based on the species characteristics (i.e. large, fast growing, shallow root system) and its condition, it is reasonable to believe that the tree will be at greater risk of failure in 10 years due to:

- increased size and extension (i.e. diameter and length) of branches subjected to increased loads (i.e. weight, wind and rain forces)
- ongoing decay of wood in existing hollows
- possible disease or decay due to wounded tree roots.

[Note: **ULE = Useful Life Expectancy.** Assessment of useful life expectancy provides an indication of health and tree appropriateness and involves an estimate of how long a tree is likely to remain in the landscape based on species, stage of life (cycle), health, amenity, environmental services contribution, conflicts with adjacent infrastructure and risk to the community. For more information on ULE or SULE (Safe Useful Life Expectancy), check out:

<https://treenet.org/resource/determining-the-retention-value-of-trees-on-development-sites/> and <https://www.blacktown.nsw.gov.au/files/assets/public/public-exhibitions/spp-18-00005/tree-sule-2005.revised.pdf>

4. The arborist report suggests (p. 15) that the trip hazard posed by the protruding root extending west, and therefore the usability of this area, could be mitigated by other means such as incorporating fill and lawn into the area around the tree and thus providing a usable landscaped area or constructing a raised timber deck for public use. Have any of these options being investigated or considered, and to what extent?

Yes, however when considering the trip hazard in combination with the potential hazard of a falling branch and the expected increase in pool users after redevelopment, if we simply put lawn around the tree or constructed a raised timber deck, we would potentially be increasing the safety risk by permitting people to sit / lay immediately beneath the tree canopy. We have therefore opted for a mulched garden bed around the tree to reduce the potential safety risk (i.e. remove the stationary human targets from the immediate hazard area).

Note: there was a falling tree branch incident at a playground last week in Mt Barker.
<https://7news.com.au/news/south-australian-mothers-leg-broken-in-three-places-as-kids-and-parents-hit-by-falling-tree-branch-at-mount-barker-playground--c-13261765>

5. Your supporting statement explains that retaining the uncontrolled contaminate fill on-site is the highest preference from an EPA perspective, and that to dispose of this fill elsewhere will incur waste disposal fees. Are you able to provide an estimate for what these fees might be?

Refer to previous email (attached).

Regards,

Jared Barnes AILA
MANAGER, CITY PROJECTS

City of Norwood Payneham & St Peters
175 The Parade, Norwood SA 5067 | *Kaurna Country*
Telephone
Mobile
Email
Website www.npsp.sa.gov.au

From: Kieran Fairbrother <KFairbrother@npsp.sa.gov.au>
Sent: Tuesday, January 16, 2024 4:27 PM
To: Jared Barnes
Cc: Geoff Parsons ; Peter Wellington ; Derek Langman
Subject: RE: Planning Application for Variation to Planning Approval to remove Significant Tree #2 - Payneham Memorial Swimming Centre

Hi Jared and Peter,

I do have a few queries/request for further information for this one, if you wouldn't mind responding to the following as soon as possible:

1. In your supporting statement (attached), on page 2 and throughout, you quote comments from the arborist you engaged for this project. However, I cannot see those words in the arborist report provided with this application. Do you have another report/correspondence in which these statements are made, and if so can you please provide these? (This is important because there are comments here about the tree being difficult to retain and roots growing in the vicinity of the pool etc)
2. Do you have any evidence to substantiate the suggestion that roots from this tree may have caused or contributed to cracking causing leakage in the existing pool, per page 2 of your supporting statement?
 - a. And as a subsidiary to this, has there been any consideration given to a root barrier being constructed around the new swimming pool to mitigate this in the future?
3. Do you have any evidence from your arborist to substantiate the suggestion that the safety risk attributable to the tree will increase in 10 years' time (per page 3 of your supporting statement)?
4. The arborist report suggests (p. 15) that the trip hazard posed by the protruding root extending west, and therefore the usability of this area, could be mitigated by other means such as incorporating fill and lawn into the area around the tree and thus providing a usable landscaped area or constructing a raised timber deck for public use. Have any of these options being investigated or considered, and to what extent?

5. Your supporting statement explains that retaining the uncontrolled contaminate fill on-site is the highest preference from an EPA perspective, and that to dispose of this fill elsewhere will incur waste disposal fees. Are you able to provide an estimate for what these fees might be?

I look forward to your responses.

Please let me know if I can expand on any of the above.

Regards,

Kieran Fairbrother
SENIOR URBAN PLANNER

City of Norwood Payneham & St Peters

175 The Parade, Norwood SA 5067

Telephone

Email

Website www.npsp.sa.gov.au

**Instrument of Delegation
Assessment Manager**

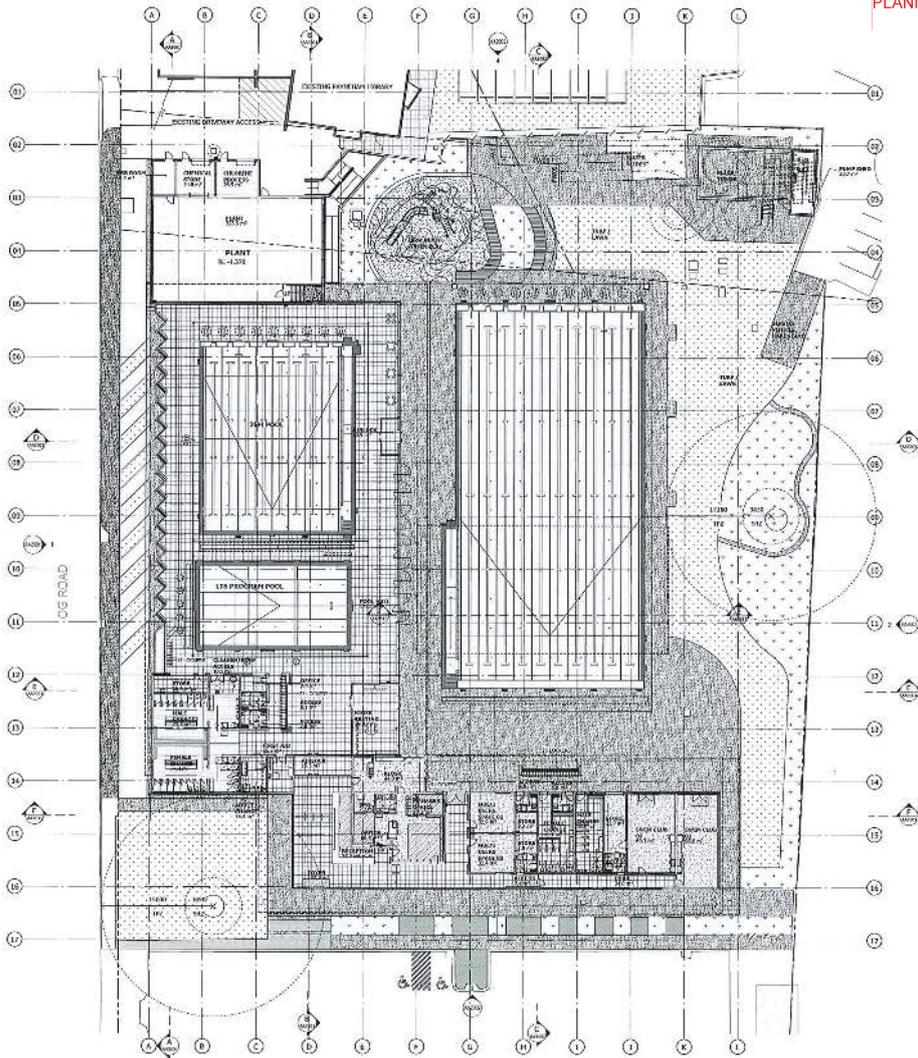
1. In exercise of the power contained in Section 100 of the *Planning, Development and Infrastructure Act 2016 (PDI Act)* the following powers and functions under the PDI Act and statutory instruments made thereunder are hereby delegated this 31st day of January 2022 to the City of Norwood Payneham & St Peters, Council Assessment Panel (**Council Assessment Panel**) subject to the conditions and/or limitations, if any, specified below:
 - 1.1 The power pursuant to Section 102(1)(a) of the PDI Act to grant or refuse planning consent, including the associated powers to reserve matters and/or impose conditions.
2. The exercise of the powers and functions delegated in paragraph 1 above is to be limited to assessment of Development Application ID 24000067 for a *Variation to Development Applications 22017508 and 23024217 comprising the removal of Tree 2 (a significant Flooded Gum)* at 188 O G Road Felixstow SA 5070.



Signed
Geoff Parsons
Assessment Manager

CITY OF NORWOOD PAYNEHAM ST PETERS
 PLANNING, DEVELOPMENT AND INFRASTRUCTURE ACT 2016
 PLANNING CONSENT GRANTED

FOR APPROVAL
 AND STAMPING



Attachment 5



FOR TENDER
 NOT TO BE USED IN ANY CONTRACT

Project Name: **CITY OF NORWOOD PAYNEHAM ST PETERS**
 Project Number: **21-0255**
 Project Description: **GENERAL ARRANGEMENT PLAN - GROUNDED OVERHALL**

Scale: **1:200**
 Drawing Number: **AA1202**
 Date: **15/08/2022 10:54:59 AM**



6. **DEVELOPMENT APPLICATIONS – DEVELOPMENT ACT**
7. **REVIEW OF ASSESSMENT MANAGER DECISIONS**
8. **ERD COURT APPEALS**
9. **OTHER BUSINESS**
(Of an urgent nature only)
10. **CONFIDENTIAL REPORTS**
11. **CLOSURE**