Pakenham Golf Course Feasibility Study

Stage 2 Report

June 2025

Table of Contents

Stage 2 Report 3

Executive Summary 3

Introduction 4

Key findings in steps 1 to 4 5

Options identified 7

Option assessment 9

Option 1 – Golf 9

Option 2 – Active Open Space 15

Option 3 – Passive Open Space 21

Next steps 25

References 27

Interim reports and advice 28

Review of 'Future of Golf at Deep Creek Reserve - Golf Business Analysis', prepared by Well Played Golf Business Consultancy Report in March 2025 29

Pakenham Golf Course Feasibility Study - Stage 1 Interim Report, 4 April 2025 38

Meeting notes – Cardinia Coordinator of Strategic Planning 45

Deep Creek Reserve Biodiversity Assessment 29 May 2025 50

Deep Creek Golf Club - Planning Scheme considerations 67

ABN: 16452195837
178 Osborne Street, Williamstown
Stephen@novaratio.com.au
0417 207 847

Stage 2 Report

Executive Summary

This report describes the process to assess the feasibility of golf at Deep Creek Reserve, following the steps contained in guidelines provided by the Minister for Planning in Directive 21 – Golf Course Redevelopment, and then to determine whether there are other open space uses suitable for the land.

A series of findings are described that address the viability of the Pakenham Golf Course and its role in the Cardinia open space network, detail relevant heritage, environmental and community issues, and discuss land use planning considerations and the relationship of the Pakenham Golf Course with nearby residential areas and public transport.

Three potential options have been identified for further consideration:

1. Continue with golf.
2. Replace golf with active open space.
3. Replace golf with passive open space.

These options are described and compared to understand how each contributes to achievement of the Council's goals, the cost to Council, and the impact on neighbours and adjacent land uses. This is followed by a high-level benefits and costs assessment of each option.

The next step in the feasibility process to engage with the community.

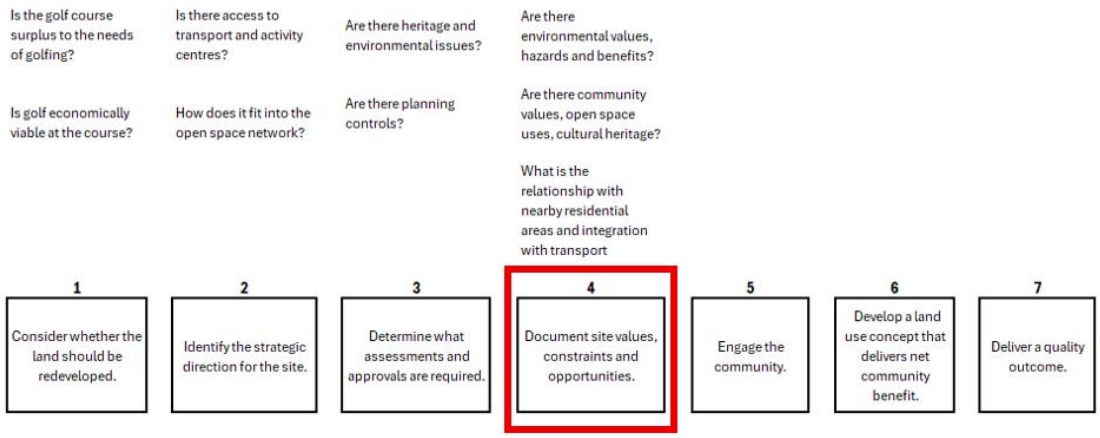
ABN: 16452195837
178 Osborne Street, Williamstown
Stephen@novaratio.com.au
0417 207 847

Introduction

The Pakenham Golf Course (PGC) Feasibility Study has 3 key stages:

1. Determine whether golf is viable and the best use of the land at Deep Creek Reserve.
2. If golf is not the best use for some or all the land at Deep Creek Reserve, determine if there is any other public open space purpose for the land.
3. If there is no other public open space purpose the land needs to be used for and it was to be re-zoned and sold, where the sale proceeds would be used.

It has been established in Stage 1 (see attached report) that golf is viable. The purpose of this report is to describe constraints and opportunities for future uses of the Pakenham Golf Course land. The Ministerial Guideline 21 – Golf Course Redevelopment has set a 7-step pathway for determination of options when golf courses are assessed for redevelopment.



ABN: 16452195837
178 Osborne Street, Williamstown
Stephen@novaratio.com.au
0417 207 847

This process is now at Step 4. The next stage in decision making involves community engagement to help decide on the option that delivers the best outcome.

Key findings in steps 1 to 4

- Golf at Pakenham Golf Course has been determined not to be surplus to the needs of golfing and to be economically viable.
- Pakenham Golf Course is close to the East Pakenham station and the Pakenham activity centre and both are expected to have impacts of land use surrounding the Pakenham Golf Course in the medium-to-long-term.
- The open space network has a higher level of provision of passive open space and less provision of active open space in Pakenham. Demand for active open space is capable of being met at nearby locations but may be met more economically at Deep Creek Reserve.
- The Pakenham Golf Course functions as a low-quality but important urban biolink node, connecting multiple creeks and wetlands. Further ecological studies are required to inform any future land use or development planning. A cultural heritage assessment of the southern section of Deep Creek Reserve didn't identify any Aboriginal cultural heritage material and the area was considered to be of low archeological assessment.
- Pakenham Golf Course is in a Public Park and Recreation Zone. Existing permits are limited in scope as the uses and works have been undertaken by or on behalf of Council (as the relevant land manager) and therefore exempt from permit requirements. Overlays and specific controls exist and are relevant to the use and development of some or all of the land. Any significant uplift in activity and development will be subject to public engagement and require specific considerations of amenity impacts, design and built form, landscape, carparking impacts, and traffic management.
- Environmental values include scattered remnant trees with some high-quality patches, some significant native plant species, and diverse fauna habitats. A potential environmental benefit of Deep Creek Reserve is the proposed three creeks wetland development.
- Community values include the provision of a large green open space, the opportunity for participation in golf at a fully public course, and access to passive open space.
- Pakenham Golf Course is near public transport and surrounded by low density residential areas.

ABN: 16452195837
178 Osborne Street, Williamstown
Stephen@novaratio.com.au
0417 207 847

Three options have been identified:

1. Continue with golf.
2. Replace golf with active open space.
3. Replace golf with passive open space.

Each option has been compared on the basis of the extent to which it achieves the goals in Council adopted plans, the cost to Council to implement the option, and the impacts of the option on the local area. This comparison has been informed by a high-level assessment of the benefits, costs and risks of each option.

It is possible that there are combinations of options that are possible. For example, golf with active open space or active open space with passive open space. The key determinant of whether any of these combinations are possible is the preference between the three primary options.

It is important to note that none of the options requires re-zoning of the land, all options continue uses consistent with the purposes of acquisition of the land, all options continue the operation of the function centre/café, none of the options affect continued implementation of the masterplan for the southern section of Deep Creek Reserve, and all options provide flexibility to accommodate future changes in surrounding land uses.

The option to sell the land is not considered viable because there is demand for golf, the course is economically viable, and there are local active open space needs. There is no compelling reason to ask the Minister for Planning for an exemption to comply with the direction and request for an amendment to the planning scheme is unlikely to succeed for the same reasons it has failed twice in the past.

ABN: 16452195837
178 Osborne Street, Williamstown
Stephen@novaratio.com.au
0417 207 847

Options identified

The following options have been identified in conjunction with Well Played Golf.

KEY

Goal achievement	Cost to the Council	Impacts on locality
☑ achieves least goals	$ least cost	↓ less impact than golf in the past
☑☑ intermediate	$$ intermediate	→ same impact as golf in the past
☑☑☑ achieves most goals	$$$ most cost	↑ to ↑↑↑ more impact than golf in the past

Option	Description	Overview	Goals	Cost	Impacts
1. Golf – the Pakenham Golf Course is not surplus to the needs of golfing and is economically viable.	Current on and off-course golf activities continue with repairs and maintenance to existing course infrastructure. Patronage can expect to increase, and the course should operate at no cost to council. There are two variations on Option 1: Option 1a) is to enable limited further investment in off-course golf facilities (i.e. mini golf, driving range, simulators and golf entertainment), which would increase patronage (community participation in golf) and could provide income for the council. Option 1b) is to enable optimal further investment in off- course golf facilities to maximise patronage (community participation in golf) and revenue to council.	This option has the least impact as the least change option and provides maximum flexibility to accommodate uncertainty about future land use. Options 1a) balances sensible financial investment with increased participation in on-course and off-course golf and a financial return to the council. Option 1b) potentially has a major impact on neighbours through increased traffic and noise with greater financial returns to council.	☑☑	$	→ ↑ ↑↑

ABN: 16452195837
178 Osborne Street, Williamstown
Stephen@novaratio.com.au
0417 207 847

	Option	Description	Overview	Achieves goals	Cost to council	Impacts
2.	Active Open Space – there is a shortfall in active open space provision in Pakenham	The part of the course not subject to flooding (approximately 20 hectares) is redeveloped into an active sports park to meet a range of community needs and address the under-provision of active sports facilities in Pakenham. The remainder of the course would form part of the conservation parklands at Deep Creek Reserve.	This option provides active sport facilities (based on a typical active sports park in a new subdivision) on the 9-holes that do not flood and converts the remaining 9-holes to passive open space with the Café/Function centre continuing to operate in a parkland setting. It could replace other planned investment in active sports facilities in Pakenham.	☑☑☑	$$$	↑
3.	Passive Open Space – there is an overprovision of passive open space in Pakenham, however, urban development is increasing population density	The golf infrastructure (i.e. greens, driving range, irrigation) is removed and the course is converted into passive open space with an emphasis on nature conservation.	This option converts the golf course into a passive open space with the Café/Function centre continuing to operate in a parkland setting.	☑	$$	↓

ABN: 16452195837
178 Osborne Street, Williamstown
Stephen@novaratio.com.au
0417 207 847

Option assessment

A high-level benefits and costs assessment has been completed for each option by council officers from strategic planning, statutory planning, open space planning, recreation, and major projects in conjunction with Nova Ratio. Reference reports and advice used in the analysis are at the end of the report.

Benefits have been identified, described, and, where possible, quantified and monetised. The beneficiaries have also been identified. Costs have been identified and, where possible, quantified and monetised. Those bearing the costs have also been identified. Risks associated with benefits and costs have also been identified and rated for inherent risk and residual risk with controls.

There are qualitative and quantifiable benefits and costs associated with decisions about public land. An attempt has been made to identify both of them to ensure all relevant matters are considered in making a decision in the best interests of the community in the short and long term.

Option 1 – Golf

Current on and off-course golf activities continue with repairs and maintenance to existing course infrastructure.

Patronage can expect to increase, and the course should operate at no cost to council.



ABN: 16452195837
178 Osborne Street, Williamstown
Stephen@novaratio.com.au
0417 207 847

Council's goals relevant to Option 1

The Cardinia Planning Scheme states the following strategic directions regarding golf:

- Under Clause 21.01-1 under Cardinia Shire Key Issues and Strategic Vision it states *Ensuring any redevelopment of golf courses has net community benefit and does not adversely impact upon the environment*.
- Under Clause 21.04-5 under "Tourism" it states *Facilitate the development of complimentary facilities at golf courses including accommodation, conferencing and dining facilities where appropriate*.

Sport Australia surveys participation in sport and recreation and golf ranks as the 6th most popular club activity and 4th most popular club activity for males. Golf Australia estimates that about 3.8 million (19%) of adult Australians played golf in 2023/24.

The Active Cardinia Strategy aims to increase participation in sport and active recreation, with a focus on reducing barriers for people that are less active. This includes encouraging physical activity at all life stages and removing barriers to participation identified by the community, such as distance to travel, the activity not being accessible, affordability, perceived safety, and lack of time. The Pakenham Golf Course is well located to help overcome these barriers.

Summary of benefits, costs and risks

1. This option continues the provision of a fully public 18-hole golf course with a café/function centre, pro shop and driving range to support participation in golf. The funds required to repair and upgrade the course are forecast to be recovered through increased patronage at levels that will have a minimal impact on the surrounding neighbourhood.
2. Funds to carry out required works can be provided by a private operator and Council could end paying only the costs of major infrastructure and facility renewal. If Council provides funding for the repairs and upgrade the course, the option of Council or community management of the course becomes available.
3. Options 1a and 1b can be considered if Option 1 is the preferred option. This would need to be done through some form of market testing to determine the amount of investment and type of development the private sector is prepared to make. If the

ABN: 16452195837
178 Osborne Street, Williamstown
Stephen@novaratio.com.au
0417 207 847

number of holes required for on-course golf ends up being 6 or 9-holes, it may enable some or all of Option 2 or 3 to be pursued.

4. Existing environmental values are unaffected under Option 1 and current levels of community access to the course as passive open space can be expected to continue.
5. The key risk is return of the investment to repair and upgrade the course because it relies on building much higher levels of patronage than existed when the course was closed.

High level benefits, costs and risks assessment

Benefit	QTY	$	Who	Comment
Requires the least upfront capital investment of the 3 options	As per GSM reports	$1,900,00	Council or private investor	Capital potentially available from a private investor
It is affordable for people of all ages to start playing golf	4,000	Unknown	Beginner golf player	Increased social connection. Assumes 10% of players are beginners
Provides non-golf activities for all of the community to enjoy (playground, function centre, café)	Unknown	Unknown	Non-golf player	Increased social connection. Includes bookings of the function centre and attending the Café
Public access for casual golf	25,000	$2,671,568	Golf players	This is an increase of about 10,000 players and an increase in revenue of $3,170,000 from 2023/24.

ABN: 16452195837
178 Osborne Street, Williamstown
Stephen@novaratio.com.au
0417 207 847

Benefit	QTY	$	Who	Comment
Public access to driving range	15,570	Included above	Driving range users	This is an increase of 7,000 driving range users
No restrictions how you play (dress code, player numbers)	Unknown	Unknown	Golf player	Broadens patronage to include people unable or unwilling to meet restrictive rules
Nature conservation	Unknown	Unknown	Community	Assumes current environmental values continue or improve
Council income from golf	Nil	Nil	Council	No revenue except under Option 1a) or 1b)

Cost	QTY	$	Who	Comment
Green fee	25,000	$750,000	Players	Assumes green fee remains the same ($29)
Driving range	15,570	$240,000	Players	Assumes fee remains the same ($15)
Golf course maintenance, repair, renewal and replacement	Not applicable	Unknown	Private investor	Assumes commercial operator meets this cost

ABN: 16452195837
178 Osborne Street, Williamstown
Stephen@novaratio.com.au
0417 207 847

Cost	QTY	$	Who	Comment
Function centre/café maintenance, repair, renewal and replacement	Unknown	Unknown	Council	Assumes council continues to bear majority of cost as landlord
Loss of access to passive or active open space	Unknown	Unknown	Community	Assumes access to the golf course would be more restricted than it is now because of increased numbers of players
Golf course infrastructure renewal (water supply, irrigation, greens, fairways) shift	As per GSM reports	$1,900,000	Private investor	Cost is based on estimates in reports provided by GMS
Investment in on-course and off-course facilities in Options 1a) or 1b)	Unknown	$2,795,000 to $5,885,000	Private investor	Assumes development of more off-course golf facilities

Risk	Implication	Likelihood	Consequence	Inherent Risk Rating
Declining numbers of players and current low demand (currently 14,237 rounds of golf a year and 8,503 buckets of balls bought at driving range)	No return on use of the land for golf or investment in golf infrastructure	Possible	Moderate	**Moderate** Controls available – transfer risk to private investor and operator Residual risk – Low risk

ABN: 16452195837
178 Osborne Street, Williamstown
Stephen@novaratio.com.au
0417 207 847

Risk	Implication	Likelihood	Consequence	Inherent Risk Rating
Investment required to improve golf facilities is not available	The course does not get the required return financially or in non-financial benefits	Possible	Major	**High risk** Controls available – transfer risk to private investor and operator Residual risk – Low risk
Increased numbers of people using golf and golf entertainment facilities will negatively impact neighbourhood	More cars on Cameron Ave and noise from nighttime activities	Possible	Major	**High risk** Controls available – limit hours of operation nighttime outdoor activities Residual risk – Moderate risk
Loss of control over the Pakenham Golf Course land	A private investor with a long-term lease could change the service offering to optimize profits rather than community participation. Changes in land uses could occur in the local area and the council cannot respond.	Possible	Moderate	**Moderate risk** Controls available – Council limits lease tenure and applies conditions, or Council operate golf course Residual risk – Moderate risk

ABN: 16452195837
178 Osborne Street, Williamstown
Stephen@novaratio.com.au
0417 207 847

Option 2 – Active Open Space

The part of the course not subject to flooding (approximately 20 hectares) is redeveloped into an active sports park to meet a range of community needs and address the under-provision of active sports facilities in Pakenham.



Council's goals relevant to Option 2

The Active Cardinia Strategy has determined that across the shire there is a forecast deficit of 9 AFL ovals, 26 soccer fields, 11 stadium courts and 1 baseball field by 2041. Specifically. in the growth corridor that deficit is 12 ovals, 20 soccer fields, 15 tennis courts, 8 netball courts, 2 bowling greens, 1 hockey field, and 7 stadium courts by 2041.

The strategy supports initiatives that expand opportunities for participation in sport by women and girls, young people, older adults, culturally diverse communities, LGBTQIA+ communities, First Nations Peoples, people with disabilities, and individuals with lower physical activity levels. Deep Creek Reserve is well located to help expand opportunities for these groups.

ABN: 16452195837
178 Osborne Street, Williamstown
Stephen@novaratio.com.au
0417 207 847

Summary of benefits, costs and risks

1. This option has the potential to meet the demand for 3 AFL ovals and 8 netball courts for active sport provision. The cost of developing facilities can be met from open space contributions and intergovernmental grants.
2. If the part of the Pakenham Golf Course that is not subject to flooding is developed it will avoid areas of greatest nature conservation value and reduce the impact on Deep Creek. Facilities can be located to minimise loss of significant trees and vegetation.
3. The impact on neighbours can be reduced through the design of facilities and is likely to be similar to the current use for golf in terms of the number of people using the facilities and hours of operation.
4. The key risk is loss of significant vegetation.

High level benefits, costs and risks assessment

Benefit	QTY	$	Who	Comment
Increased opportunities for community (junior and senior) participation in netball and football to meet shortfall identified in Active Cardinia Strategy.	600 people	Difficult to monetise	Community	Assumes a strong club is formed in each code
Active sporting hub that is well serviced by public transport	600 people plus supporters	Difficult to monetise	Community	Pedestrian connections exist to both Pakenham and East Pakenham stations

ABN: 16452195837
178 Osborne Street, Williamstown
Stephen@novaratio.com.au
0417 207 847

Benefit	QTY	$	Who	Comment
Nature conservation areas retained in remaining areas of the golf course	25 hectares	Difficult to monetise	Community	Habitat is provided for threatened species (Growling Grass frog, Southern Brown Bandicoot, and Latham's Snipe)
Active open space development and use still enables passive open space use	52 hectares	Difficult to monetise	Community	Passive open space use can increase from current levels where golf restricts access
Existing function centre and café continue to operate serving the playground and passive open space	Function centre and cafe	Not applicable	Community	Assumes masterplan for Deep Creek Reserve is implemented and revenue from lease covers building operating costs

Cost	QTY	$	Who	Comment
Development of active open space facilities	1 pavilion, 3 ovals and 8 netball courts	$20,000,000	Council	Funding sources include open space contributions fund and intergovernmental grants, Estimated costs for ovals is $7m, pavilion is $5-7m, and netball courts is $7m.

ABN: 16452195837
178 Osborne Street, Williamstown
Stephen@novaratio.com.au
0417 207 847

Cost	QTY	$	Who	Comment
Ongoing facility maintenance, repair, renewal and replacement of active open space	1 pavilion, 3 ovals and 8 netball courts	$750,000/annum	Council	Funding from rates
Cost of maintenance of remaining areas of golf course as passive open space	25 hectares	$250,000/annum	Council	Funding from rates
Trees or areas of conservation value will be lost to enable active open space development	Unknown	Unknown	Community	Survey required to determine number and extent of significant trees and vegetation
A Cultural Heritage Management Plan will be required for the Pakenham Golf Course land	CHMP	$50,000	Council	Preliminary estimate
A masterplan will be required to guide the development of active open space facilities	Masterplan	$100,000	Council	Preliminary estimate

ABN: 16452195837
178 Osborne Street, Williamstown
Stephen@novaratio.com.au
0417 207 847

Risk	Implication	Likelihood	Consequence	Inherent Risk Rating
Cost to develop active open space is additional to current budget	Unbudgeted cost	Possible	Moderate	**Moderate risk** Controls available – ensure development replaces funded active open space Residual risk – Low risk
Trees or areas of natural conservation value are present where active open space development is planned	Loss of vegetation and habitat	Possible	Moderate	**Moderate risk** Controls available – map significant trees and vegetation and design sportsfields around them Residual risk – Moderate risk
Stakeholders have contributed financially to development of the golf course	A legal or moral barrier to use for active open space	Unlikely	Minor	**Low risk**

ABN: 16452195837
178 Osborne Street, Williamstown
Stephen@novaratio.com.au
0417 207 847

Risk	Implication	Likelihood	Consequence	Inherent Risk Rating
Land was acquired with constraints limiting use to recreation, drainage and roads	A legal barrier to other conversion to other uses	Unlikely	Minor	**Low risk**
People using active open space facilities will negatively impact neighbourhood	More intensive development and use of the northern section of the golf course	Possible	Moderate	**Moderate risk** Controls available – design facilities to minimize impacts on neighbours Residual risk – Low risk
Cultural heritage management plan will find Aboriginal cultural heritage material that	Facility development will be constrained	Unlikely	Moderate	**Moderate risk** Controls available – modify design of development to avoid sensitive areas Residual risk – Low risk

ABN: 16452195837
178 Osborne Street, Williamstown
Stephen@novaratio.com.au
0417 207 847

Option 3 – Passive Open Space

The golf infrastructure is removed, and the course is converted into passive open space with an emphasis on nature conservation.



ABN: 16452195837
178 Osborne Street, Williamstown
Stephen@novaratio.com.au
0417 207 847

Council's goals relevant to Option 3

The Cardinia Open Space Strategy has identified Deep Creek Reserve as the largest open space in the Pakenham profile area. The total provision of open space in the Pakenham profile area exceeds the benchmark of 5ha/1,000 residents for current and forecast population. The current provision is 7.4ha/1,000 residents. This provision would increase by approximately 15% if the Pakenham Golf Course became passive open space.

The current provision of active open space is below the benchmark of 2ha/1,000 residents. To meet this benchmark, an additional 71ha of active open space is needed, which increases to 85ha by 2031 with population growth.

Access to open space in this area will be enhanced by the connection from Pakenham East Railway into Deep Creek Reserve.

Summary of benefits, costs and risks

1. This option increases the amount of passive open space and utilisation of existing open space.
2. The cost of trails, seating and other passive open space improvements may be able to be met from open space contributions and rates revenue.
3. Nature conservation and regional water management (three creeks wetland development) are unconstrained by golf or active open space use.
4. The impact on neighbours is less than the current use for golf in terms of the numbers of people using the facilities and hours of operation.

ABN: 16452195837
178 Osborne Street, Williamstown
Stephen@novaratio.com.au
0417 207 847

High level benefits, costs and risks assessment

Benefit	QTY	$	Who	Comment
Increased opportunities for participation in use of passive open space.	1000 people	Difficult to monetise	Community	As urban density increases around Pakenham and East Pakenham stations, more people will be living close by and using open space at Deep Creek Reserve
Continuation of low intensity use of Deep Creek Reserve	Unknown	Unknown	Community	Assumes the impact on neighbours from passive open space use is comparable with the current low levels of golf being played
Increased nature conservation	Unknown	Unknown	Community	Habitat is provided for threatened species (Growling Grass frog, Southern Brown Bandicoot, and Latham's Snipe)
Water treatment (the Three Creeks)	Unknown	Unknown	Community	Melbourne Water to plan and fund as part of regional water management.
Expanded educational activities associated with the Cardinia Environment Centre	Unknown	Unknown	Community	Cardinia Environment Coalition advice.

ABN: 16452195837
178 Osborne Street, Williamstown
Stephen@novaratio.com.au
0417 207 847

Cost	QTY	$	Who	Comment
Decommissioning of golf course infrastructure (water supply, driving range, irrigation)	Removal of greens, irrigation and water supply	$1,000,000	Council	
Ongoing maintenance, repair, renewal and replacement of passive open space	52 hectares	$590,400/ annum	Council	A variation to the open space contract will be required. Doesn't include renewal and replacement funding.
Provision of passive open space in excess of the target levels of provision set for Cardinia	52 hectares	Difficult to monetise	Council	Target levels of passive open space are currently being exceeded in Pakenham. Development, maintenance and renewal of additional open space needs to be funded.
Passive open space infrastructure improvements – paths, seats, etc.	52 hectares	$350,000	Council	
A masterplan will be required to guide the demolition of the golf course and development of passive open space infrastructure	52 hectares	$100,000	Council	

ABN: 16452195837
178 Osborne Street, Williamstown
Stephen@novaratio.com.au
0417 207 847

Risk	Implication	Likelihood	Consequence	Inherent Risk Rating
Costs to maintain passive open space	Provision of passive open space above the target level for Cardinia will require a cross subsidy for maintenance	Likely	Minor	**Moderate risk**

Next steps

The next step in the 7-step pathway in the Ministerial Guideline 21 – Golf Course Redevelopment is to formally engage with the community to discuss the options that Council considers to be viable for the Pakenham Golf Course.

The Cardinia Community Engagement Policy 2025 - 2029 provides guidance on selecting an appropriate engagement method, which includes consideration of:

- Effective targeted promotion to those affected by the project.
- In person community engagement opportunities (pop ups, workshops, information sessions, events).
- Online engagement methods.
- Accessible locations for engagement activities.
- Times and dates of engagement activities.
- Alternative formats ie bilingual or Auslan interpreters, audio, easy read, hard copies, large print etc.

Engagement about the future of the Pakenham Golf Course should target those who have used the course or who live nearby, as well as those who have not used the course but who may either play golf (on or off-course) in the future or participate in other open space activities possible under the various options.

ABN: 16452195837
178 Osborne Street, Williamstown
Stephen@novaratio.com.au
0417 207 847

The Cardinia Community Panel may be a good starting point to draw a group of local people to discuss the options to inform broader consultation with the Cardinia community.

This is an important decision involving an important community asset where significant financial investment is required in the short and long-term. It is important to consider all options now to provide a foundation for decision making about the use of the land and be prepared for any future eventuality.

ABN: 16452195837
178 Osborne Street, Williamstown
Stephen@novaratio.com.au
0417 207 847

References

1. Cardinia Planning Scheme, Amendment C66, Pakenham Golf Course Redevelopment, Panel Report, 2005
2. Deep Creek Reserve: Development of Deep Creek Parkland - Cultural Heritage Management Plan, 10 December 2015.
3. Cardinia Planning Scheme Amendment C209, Planning Permit Application No P1502, Panel Report, 2017.
4. Planning and Environment Act 1987, Section 12(2)(a). DIRECTION NO. 21 - GOLF COURSE REDEVELOPMENT, 25 June 2020.
5. Planning Guidelines for the Conversion of Golf Course Land to Other Purposes, June 2020.
6. Future of Golf at Deep Creek Reserve - Golf Business Analysis, Well Played Golf Business Consultancy Report, March 2025.

ABN: 16452195837
178 Osborne Street, Williamstown
Stephen@novaratio.com.au
0417 207 847

Interim reports and advice

1. Nova Ratio - Review of the 'Future of Golf at Deep Creek Reserve - Golf Business Analysis', report prepared by Well Played Golf Business Consultancy Report in March 2025.
2. Nova Ratio - Pakenham Golf Course Feasibility Study - Stage 1 Interim Report, 4 April 2025
3. Nova Ratio - Meeting notes – Cardinia Coordinator of Strategic Planning, 25 May 2025
4. Cardinia Shire Council - Deep Creek Reserve Biodiversity Assessment, 29 May 2025
5. Cardinia Shire Council - Planning Scheme considerations - Deep Creek Golf Club, 16 June 2025.

ABN: 16452195837
178 Osborne Street, Williamstown
Stephen@novaratio.com.au
0417 207 847

Review of 'Future of Golf at Deep Creek Reserve - Golf Business Analysis', prepared by Well Played Golf Business Consultancy Report in March 2025

Introduction

The Pakenham Golf Course (PGC) Feasibility Study has 3 key stages:

1. Determine whether golf is viable and the best use of the land at Deep Creek Reserve.
2. If golf is not the best use for some or all the land at Deep Creek Reserve, determine if there is any other public open space purpose the land could be used for.
3. If there is no other public open space purpose the land needs to be used for and it was to be re-zoned and sold, where the sale proceeds would be used to do.

To determine the viability of golf at the PGC a specialist consultant was asked to provide advice. This report assesses that advice in the context of the feasibility study.

Viability of golf at Deep Creek Reserve

Well Played Golf Business Consultancy (WPG) was engaged to provide a high level and authoritative report on the PGC that considered three scenarios:

Scenario	Patronage and revenue	Improvement and investment
1. Optimal	What is the optimal patronage that the PGC is capable of supporting given the course design, location and competition, and what revenue could be expected if this level of patronage was to be achieved?	What improvements and investment in the course is required to achieve optimal utilisation of the PGC?

ABN: 16452195837
178 Osborne Street, Williamstown
Stephen@novaratio.com.au
0417 207 847

2. Limited	What patronage and revenue can realistically be expected with prudent investment in course improvement?	What improvements and investment are required to improve utilisation of the PGC with a reasonable chance of getting a return on that investment?
3. Business as usual	What patronage and revenue can be expected if repairs and maintenance are carried out on the course?	What is the minimum investment needed for the PGC to continue operating?

WPG were engaged for their expertise in golf business planning and performance, and their current and relevant experience in reviewing publicly owned and public-access golf courses.

The objective was to understand the best, worst, and most likely options available.

Findings

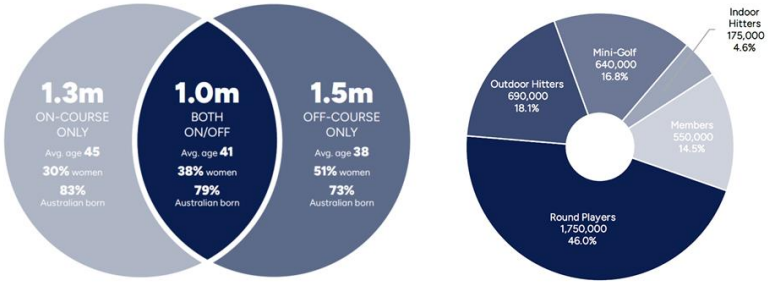
WPG assessed the market for golf in Australia, the Cardinia local area in general, and the Pakenham Golf Course in particular. Their report is comprehensive. My focus is on the advice regarding demand for golf at PGC.

Participation in golf

A key finding is that golf participation has grown in Australia since the Covid Pandemic, and it continues to grow. Golf Australia estimates that about 3.8 million (19%) of adult Australians played golf in 2023/24. Participation in golf is split between on-cource golf (i.e. playing golf on a course) and off-course golf (i.e. driving ranges, mini-golf and indoor simulators supported by sports bars, lounges and function spaces).

The split in participation between the two types of golf being played, and the overlap, is shown below, along with key demographic data.

ABN: 16452195837
178 Osborne Street, Williamstown
Stephen@novaratio.com.au
0417 207 847

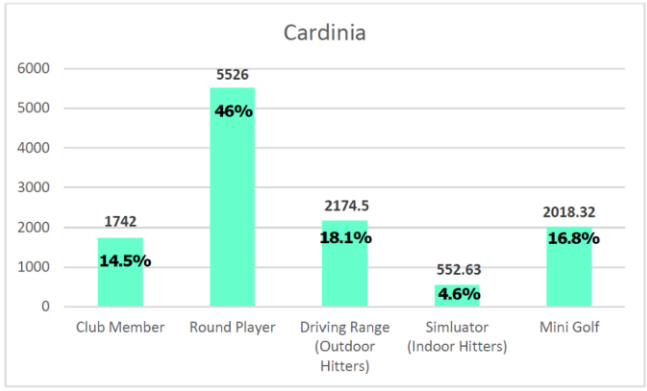


Snapshot of Australian golf participation, source: Golf Australia, 2023/24 Golf Participation Report

Off-course golf attracts more women, younger players and a greater diversity of people. This is an important point in relation to the options WPG advise to increase participation in golf at PGC.

Golf in Cardinia

Golf Australia estimates that within Cardinia 7,268 people participate in golf, and this number has the potential to increase to more than 12,000 participants. Their breakdown of participation is shown in the diagram below.



Growth opportunities for Cardinia's golf ecosystem, source: Golf Australia

ABN: 16452195837
178 Osborne Street, Williamstown
Stephen@novaratio.com.au
0417 207 847

The growth in participation in golf in Cardinia is directly related to project population growth in the municipal area.

WPG assessed golf courses in the Cardinia area. A 10km radius was used to determine the catchment for the PGC and a 20km radius for a member-based course. The location of the 4 golf courses available in or near Cardinia are shown below, along with a description of the off-course facilities available.

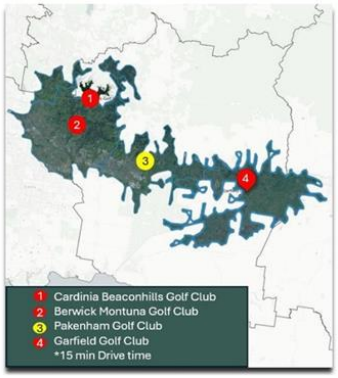
4 Golf Courses
- 3 member-based clubs with public access
  - Cardina Beaconhills Golf Club
  - Berwick Montuna Golf Club
  - Garfield Golf Club
- 1 full public access
  - Pakenham Golf Course

2 Driving Ranges
  - Berwick Montuna – (now has technology)
  - Pakenham – no technology

0 Mini golf

0 Simulator venues

Overview of Cardinia's golf ecosystem, source: Golf Australia



The distance from PGC to each of the other golf courses is between 10 and 15 kilometers, and an estimated 15-minute driving time. This gives the PGC definite catchment as a full public access golf course providing on-course and off-course golf facilities. This is important point relevant to the advice to market test future development options for the PGC because it identifies the area in which competing developments (especially off-course golf facilities) could be a threat.

Scenario analysis

The findings in relation to each scenario are shown in the right-hand column. A key assumption in each of the scenarios is that golf will continue on-course with 18 holes, and off-course with the driving range and current hospitality offering. Each of these scenarios requires investment and has revenue capable of paying back the investment within 7 to 14 years, assuming a profit margin of 10% on sales.

ABN: 16452195837
178 Osborne Street, Williamstown
Stephen@novaratio.com.au
0417 207 847

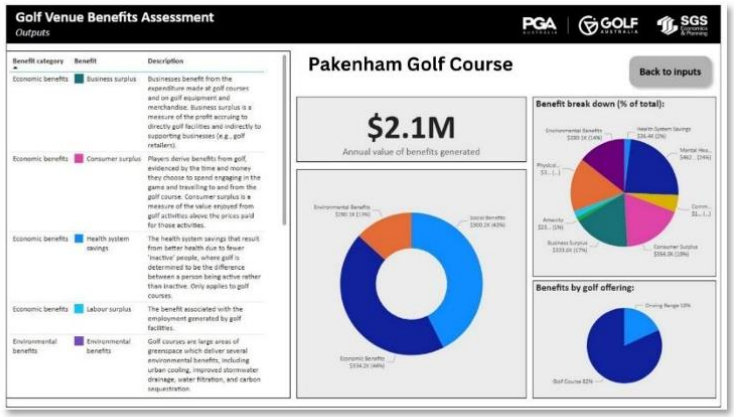
Scenario	Patronage and revenue	Improvement and investment	Findings
Optimal	What is the optimal patronage that the PGC is capable of supporting given the course design, location and competition, and what revenue could be expected if this level of patronage was to be achieved?	What improvements and investment in the course is required to achieve optimal utilisation of the PGC?	45,000 rounds of golf and 19,250 driving range users. Revenue: $4,235,908 Investment: $5,885,000 Est. profit $423,000 Simple payback 13.9 yrs
Limited	What patronage and revenue can realistically be expected with prudent investment in course improvement?	What improvements and investment are required to improve utilisation of the PGC with a reasonable chance of getting a return on that investment?	35,000 rounds of golf and 18,000 driving range users. Revenue: $3,414,420 Investment: $2,795,000 Est. profit $314,000 Simple payback 9 yrs
Business as usual (BAU)	What patronage and revenue can be expected if repairs and maintenance are carried out on the course?	What is the minimum investment needed for the PGC to continue operating?	25,000 rounds of golf (14,237 current) and 15,570 (8,503 current) driving range users. Revenue: $2,671,568 Investment: $1,900,000 Est. profit $261,000 Simple payback 7.3 yrs

In addition to the direct financial benefits and costs of each scenario provided by WPG, Golf Australia provided a Golf Venue Benefits Assessment, shown below.

ABN: 16452195837
178 Osborne Street, Williamstown
Stephen@novaratio.com.au
0417 207 847

Based on Golf Australia's recent performance assumptions, it has calculated that Pakenham Golf Course currently provides an annual benefits value of $924.2k, comprising Economic: $293.9k, Social: $350.2k, and Environmental: $280.1k.

Based on Golf Australia's forecast performance assumptions, it has calculated that Pakenham Golf Course could provide an annual benefits value of $2.1M, comprising Economic: $934.2k, Social: $900.2k, and Environmental: $280.1k.



Source: Golf Australia

They believe the PGC has the potential to provide $2.1m of economic, social and environmental benefits. WPG included the Golf Australia assessment in their report but said they disagree with some of the assumptions. Nonetheless, it indicates the quantum of benefits available to the community from continuing golf at Deep Creek Reserve. The Golf Australia data used in the model indicates a significant increase in patronage. Their forecast of increased patronage is shown in the table below.

ABN: 16452195837
178 Osborne Street, Williamstown
Stephen@novaratio.com.au
0417 207 847

Input	Current - 2024	Forecast - Conservative	Forecast – Best Practice
Local Users	90%	86	Anticipate the percentage would diversify further with increased patronage due to popularity of venue (i.e. Morack)
Intrastate Users	10%	12	
Interstate Users	0	2	
Revenue each offering			
Golf Course			18 hole golf courses operating at maximum capacity can achieve 100,000+ rounds. This can be dependent on location etc (more densely populated areas). We would conservatively estimate 60,000 – 80,000 as a target over time.
Revenue	347,000	913,000	
Rounds	13,341	35,000	
Shortened Course	0	0	N/a not in the scenario
Mini Golf	0	0	Opportunity to develop a mini-golf facility and increase visitations. A target of 30,000 rounds over time.
Driving Range			
Revenue	121,000	363,000	Gradual increase as popularity increases.
Buckets	9,800	29,400	
Simulator	0	0	N/a not in the scenario
F & B / retail			
Revenue	340,000	963,600	Increase in line with increased visitation in the above number increases
Revenue whole venue			
Est total profit	0	150,000	To be determined when inputs entered
Community spend	40,000	100,000	To be determined when inputs entered
Playing members	0	0	N/a public course
FTE workforce	7	10	To be determined when inputs entered
Land area	45	45	To be determined when inputs entered
Common land use surrounding	Residential	Residential	Residential

The increase in golf rounds from 13,341 to 35,000 will potentially bring an additional 44,000 people to the PGC (assuming 2 players for each round) and between 22,000 and 44,000 additional cars (depending on whether they travel together or separately). The increase in driving range buckets from 9,800 to 29,400 brings an extra 19,600 people, potentially in the same number of cars.

ABN: 16452195837
178 Osborne Street, Williamstown
Stephen@novaratio.com.au
0417 207 847

In the assessment of scenarios, WPG have also assumed a significant increase in patronage, with golf rounds increasing to 25,000 to 45,000, and driving range users increasing to 15,570 to 19,250 people.

Conclusion

The WPG report findings make a consistent and strong case that golf is viable at Deep Creek Reserve under each of the scenarios.

There are numerous examples evidencing the potential to increase community participation in golf in Cardinia by improving on-course and off-course golf facilities. Those facility improvements can also be funded by the private sector under a long-term lease, and external operators can deliver golf services. The council could receive an income from the operator of the golf course and the associated council-owned facilities. The council could continue to maintain the buildings or make all asset maintenance the responsibility of the course operator.

WPG recommend market testing through an expression of interest to determine what off-course golf facilities are viable, and whether an 18, 9 or smaller golf course is desirable. A benefit in doing this would be if less than 18 holes are required, when some land would become available for other open space uses or divestment to enable other investments in open space.

There are other considerations relevant to golf continuing at Deep Creek Reserve. The increased number of rounds of golf played on-course will increase the number of people travelling to and from Deep Creek Reserve. Some of the increases will come from night-time golf activities. There will also be work required to provide off-course facilities. All these potential changes have implications.

Implications of increasing golf participation

The current golf facilities have a planning permit that is likely to have conditions relevant to operating hours. It may also limit types of uses. The current amount of car parking is based on a specified number of users and may be inadequate if the number of users increased.

Cameron Avenue is the only access road to the PGC. The potential increases in patronage in the WPG report suggest an increase in people attending the PGC of around 80,000 people per annum. Assuming people travel together, this will be an increase of around

ABN: 16452195837
178 Osborne Street, Williamstown
Stephen@novaratio.com.au
0417 207 847

40,000 cars per annum. The impact on neighborhood amenity will need to be considered. The capacity of the intersection with Racecourse Road will also need to be assessed.

If more night-time golf activities occur (i.e. driving range and mini golf), the impact of lighting and noise will need to be considered. Neighbours may be affected and wildlife in the nearby wetlands disturbed. Permits will be required for works.

Finally, a long-term lease for the PGC has potential implications for the broader area of Pakenham. The PGC sits within two low-density residential areas and it is proximate to the East Pakenham station and the East Pakenham PSP. There has been a request for a road easement to cross Deep Creek at the northern end of the golf course to access land for development off Johanna Court. There are urban development and land use issues that should be considered before entering into a long-term lease for the PGC.

Recommended next steps

1. Organise a workshop with relevant council officers to get a high-level view and understanding of the land use implications in changes in the PGC.
2. Develop parameters on future use of the PGC and criteria for assessment of an EoI if market testing proceeds to enable a decision on the future of golf at Deep Creek Reserve.

ABN: 16452195837
178 Osborne Street, Williamstown
Stephen@novaratio.com.au
0417 207 847

Introduction

The Pakenham Golf Course (PGC) Feasibility Study has 3 key stages:

1. Determine whether golf is viable and the best use of the land at Deep Creek Reserve.
2. If golf is not the best use for some or all the land at Deep Creek Reserve, determine if there is any other public open space purpose the land could be used for.
3. If there is no other public open space purpose the land needs to be used for and it was to be re-zoned and sold, where the sale proceeds would be used to do.

Is the Pakenham Golf Course viable?

The Well Played Golf (WPG) report is positive about the future of golf at Deep Creek Reserve, either as a continuation of 'business as usual' (BAU) with investment to restore the course (25,000 rounds of golf (14,237 current) and 15,570 (8,503 current) driving range users; Revenue: $2,671,568; Investment: $1,900,000; Est. profit $261,000; Simple payback 7.3 yrs) or with investment in off-course facilities (45,000 rounds of golf and 19,250 driving range users; Revenue: $4,235,908; Investment: $5,885,000; Est. profit $423,000; Simple payback 13.9 yrs).

In both scenarios the council can expect private funds to be invested in return for long-term leases. In the BAU scenario the council may end up in a cost-neutral situation, and with investment in off-course facilities, the council could expect to earn revenue from the course. In both situations WPG say private operation of the course is preferred, and private maintenance is possible. A consideration for the council will be the return on capital invested in the course and facilities (estimated at $15m), and the potential to recover depreciation to fund asset renewal.

In terms of the feasibility study into Deep Creek Reserve and options analysis to inform decision making about the future of the Pakenham Golf Course (PGC), it is feasible to continue with golf.

ABN: 16452195837
178 Osborne Street, Williamstown
Stephen@novaratio.com.au
0417 207 847

Is the Pakenham Golf Course the best use of the land at Deep Creek Reserve?

The location of the PGC in Deep Creek Reserve and midway between Pakenham and Pakenham East raises some issues about whether golf remains the highest and best use for the land. Twice previously the council has attempted to change the use of the land (in 2005 rezoning of the golf course was requested to enable it to be sold and for the golf course to relocate; and in 2017 part of the golf course was requested to be rezoned to pay for improvements to course facilities). Both times the planning panel rejected the request.

The reasons for rejection remain worthy of consideration today when determining the feasibility of the PGC and the potential for the land to be used for any purpose other than public open space.

Cardinia Planning Scheme, Amendment C66, Pakenham Golf Course Redevelopment, Panel Report, 2005

Proposal

The purpose of the amendment requested was to facilitate the redevelopment of the site to provide 600 lots for residential development over approximately 60% of its area, leaving approximately 40% to provide public open space, drainage, flood storage, wetland and conservation functions.

The proceeds of sale were to be applied to assist the relocation of the golf club to a new course outside the Urban Growth Boundary. This relocation was argued to be required because the golf course did not have fairways of the currently accepted width for optimum safe play. It became severely waterlogged at times and was said to require considerable expenditure and/or expansion to remedy these concerns.

Decision

The Panel concluded as follows:

- Amendment C66 does not appear to be the product of a rigorous, directed and orderly strategic planning process for the future community and recreational needs of a swiftly growing growth corridor:
    - it does not reflect best practice in growth corridor open space planning;
    - it fails to respond adequately to Melbourne 2030 Direction 5, policy 5.6 and the Parklands Code and policy 5.7;
    - it fails to respond adequately to the Cardinia Recreational Open Space Strategy;
    - it breaches Ministerial Direction No 3 as it is not consistent with the South Eastern Growth Corridor Map;

ABN: 16452195837
178 Osborne Street, Williamstown
Stephen@novaratio.com.au
0417 207 847

- it is unlikely to offer net community benefit.

- The intended development has an unacceptably high risk of being unsustainable having not adequately addressed either the constraints imposed by the site conditions, or the protection of the existing natural assets.
- The nature of the balance between the needs of recreation and conservation has not been properly addressed. Whilst 40% of the site would be retained as open space, much of this would be required to address drainage, flood storage and conservation management requirements. The balance land is not likely to be able to provide an effective regional recreational resource and would be unlikely to be able to host active recreational opportunities.
- The long-term feasibility of the proposed protection of the Growling Grass Frog has not been established at the strategic level.

The Panel recommended that the amendment be abandoned

Cardinia Planning Scheme Amendment C209, Planning Permit Application No P1502, Panel Report, 2017

Proposal

The Amendment proposed to:

- 25 Oaktree Drive, Pakenham
  - Rezone part proposed Lot 1 PS743978C from a Public Park and Recreation Zone (PPRZ) and the land in the Oaktree Drive road reserve from Road Zone Category 2 (RDZ2) to Low Density Residential Zone Schedule 3 (LDRZ3), allowing a minimum subdivision size of 0.2 hectares.
  - Apply the Design and Development Overlay – Schedule 1 (DDO1) and Vegetation Protection Overlay – Schedule 1 (VPO1) to the land proposed to be rezoned.
- 1, 3, 5, 7, 9, 11 and 13 Ryan Road, Pakenham and 1, 2, 3, 4 and 5 Johanna Court, Pakenham
  - Remove the land from Schedule 1 and include it in Schedule 3 to the LDRZ to provide for a minimum subdivision of 0.2 hectares.
- 62 Cameron Way, Pakenham
  - Rezone land in the existing Oaktree Drive road reserve (to be known as Proposed Lot 2 PS743978C) from Road Zone Category 2 (RDZ2) to PPRZ.

ABN: 16452195837
178 Osborne Street, Williamstown
Stephen@novaratio.com.au
0417 207 847

The Deep Creek Master Plan showed how the site would be used and developed for a range of golf, open space, floodway and environmental purposes. As part of this Master Plan, the site occupied by the Golf Club rooms was identified as surplus. The Council sought to rezone this land to LDRZ3 and apply the DDO1 and VPO1 to reflect the zoning/overlays of surrounding land, and to realign the title boundaries to facilitate the sale of the land.

The council also sought to reduce the minimum lot size for LDRZ land in Johanna Court/Ryans Road to the east from 0.4 hectares to 0.2 hectares. In 2013, the Council prepared Amendment C188 which sought to retain the proposed 0.4 hectare minimum lot size for this land, which was supported at Panel and ultimately approved. The Council was seeking to reverse this decision.

Decision

The Panel considered that a critical issue in relation to this Amendment is the fact that the land is located within the South-Eastern Growth Corridor and that land to the west, north and east has already or will be developed for conventional residential development. The The location of rural-residential development in this location is a legacy of the past and whilst once located on the edge of the Urban Growth Boundary, it is now located within it.

For these reasons, the Panel considers that any proposal to rezone land from PPRZ, particularly land within a 400 metre walking catchment of residential area needs to be clearly strategically justified, having regard to the broader open space provision. Similarly, any proposal to provide additional low density residential land within the Urban Growth Boundary, to apply the DDO1 and the VPO1 also needs to be strategically justified. The Panel did not, however, consider that this justification existed.

The Panel considered that given the concern raised above, it would not be appropriate to realign the title boundaries at this stage to facilitate this rezoning. In addition, the Panel was not presented within sufficient information about the environmental values and constraints associate with the land to enable it to make an informed decision about the potential environmental impacts associated with any future subdivision and development of this land.

For these reasons, the Panel did not support this application to realign the title boundaries.
Similarly, the Panel considers there has been no strategic justification to reduce the minimum lot size of the LDRZ land to the east from 0.4 to 0.2 hectares. Amendment C188, which sought to retain the 0.4 hectare minimum lot size, has only recently

ABN: 16452195837
178 Osborne Street, Williamstown
Stephen@novaratio.com.au
0417 207 847

been approved and there has been no additional strategic work undertaken that demonstrates the need to vary the approach adopted in this Amendment.

In terms of the proposed rezoning of Oaktree Drive, the Panel was satisfied that as there is no strategic imperative to widen this road, the proposal to downgrade its status is appropriate. The Panel did, however, consider there is a need to improve the mapping to make it clear that the front of the properties along Oaktree Drive are not included in the proposed rezoning.

For these reasons, the Panel did not support the Amendment.

In 2020, the Minister for Planning released a Direction in relation to golf course redevelopment. The purpose of the Direction is to ensure that the redevelopment of a golf course delivers a net community benefit. It is directly relevant to any changes to the PGC.

MINISTERIAL DIRECTION NO. 21, GOLF COURSE REDEVELOPMENT

The Direction says that when preparing an amendment to a planning scheme or application for the redevelopment of a golf course, the following steps should be followed:

1. Consider whether the land should be redeveloped.
2. Identify the strategic direction for the site.
3. Determine what assessments and approvals are required.
4. Document site values, constraints and opportunities.
5. Engage the community.
6. Develop a land use concept that delivers net community benefit.
7. Deliver a quality outcome.

The first two steps are relevant to this stage of the feasibility study.

<u>Step 1: Consider whether the land should be redeveloped</u>

The Direction says that the following questions should be addressed in establishing whether golf course land should be converted to another use:

ABN: 16452195837
178 Osborne Street, Williamstown
Stephen@novaratio.com.au
0417 207 847

- Does the land tenure allow for conversion?
- Is the golf course surplus to golfing?
- Are there economic alternatives to conversion?
- Should the land remain as open space?

The feasibility study into Deep Creek Reserve and options analysis to inform decision making about the future of the PGC has addressed land tenure and whether the PGC is surplus to golfing. There is a strong argument that it is not surplus to golfing and it is potentially a well-located facility to increase participation in golf. The land is owned by the council. There is speculation that the land was originally transferred to Council ownership for roads or open space in a future subdivision (see 2017 Panel Report).

The question to be addressed now is whether or not the PGC is the best use of the land. This is closely coupled to the second step in the Ministerial Direction.

Step 2: Identify the strategic direction for the site

Establishing the strategic direction for the site is a key step to developing a concept for the site. Any concept for the site should begin by asking what does policy say is the best use for this site?

The strategic direction for a proposal should consider the following:

- The level of access to transport and activity centres.
- The local open space network or wildlife network.
- Whether the proposed conversion is consistent with relevant policies and strategies including:
    - the Planning Policy Framework in the Victoria Planning Provisions or relevant planning scheme
    - Metropolitan Planning Strategy any metropolitan open space strategy or regional open space strategy
    - any approved council open space strategy
    - any approved council housing strategy.

- Whether proposal has the potential to contribute to broader strategic priorities, such as:
    - Active Victoria Framework.
    - Water for Victoria Water Plan.

ABN: 16452195837
178 Osborne Street, Williamstown
Stephen@novaratio.com.au
0417 207 847

- Any regional Integrated Water Management Plan or the achievement of water sensitive urban design principles.
- Victorian 30-Year Infrastructure Strategy.
- Protecting Victoria's Environment - Biodiversity 2037.

Conclusion

The implications for broader strategic land use issues from changes to the PGC were identified in both panel reports. Consideration needs to be given to what current strategic plans say about Deep Creek Reserve. This should start by considering the location of the PGC midway between Pakenham and East Pakenham and the relationship with nearby land uses. Some specific issues that should be considered are:

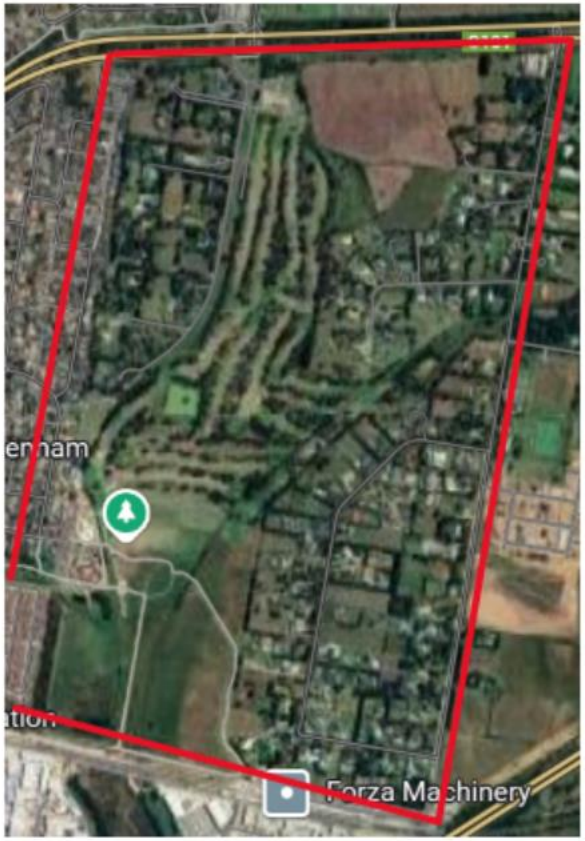
1. The potential for a road crossing of Deep Creek to connect East Pakenham to Pakenham. This has been suggested on land adjacent to the rail line in the south and connecting to Johanna Court in the north.
2. The future of low-density residential areas on the east and west side of the PGC. An attempt was made to increase the density of the area to the west of the PGC in 2017. The low-density residential area to the east of the PGC is now within 500m of a suburban rail station and may be subject to the new planning controls.
3. The planning for flood mitigation on Deep Creek. A plan for detention/wetlands has been proposed (according to the Cardinia Environment Centre) and funding for works has been committed but not provided by Melbourne Water. The PGC is currently subject to periodic inundation (see 2005 Panel Report) and it could be a factor in accommodating other active open space uses.

ABN: 16452195837
178 Osborne Street, Williamstown
Stephen@novaratio.com.au
0417 207 847

Meeting notes – Cardinia Coordinator of Strategic Planning

Context

The area of land in which Deep Creek Reserve sites between Pommel Street/Barington Drive (west) and Ryan Road (east), the Princes Highway (north) and rail line (south), could be subject to significant change in the future.



ABN: 16452195837
178 Osborne Street, Williamstown
Stephen@novaratio.com.au
0417 207 847

This change will be driven by calls to increase the density of the low-density residential areas surrounding Deep Creek Reserve between Pommel Street/Barington Drive, and Ryan Road (shown in diagram above) as land value increases with urban expansion.

There has already been a change in residential density in the Low Density Residential area, firstly to retain the 0.4 ha density and then a proposal for a discrete section of the Low Density Residential to increase density to 0.2 ha in 2017 which was abandoned by Council. The current low residential density is anomalous with the higher density of residential development in Pakenham to the west of Pommel Street/Barrington Drive, and the density proposed east of Ryan Road in the East Pakenham PSP.





ABN: 16452195837
178 Osborne Street, Williamstown
Stephen@novaratio.com.au
0417 207 847

As part of the release of Plan for Victoria the State Government's key focus is increasing housing choice and affordability with more homes near transport, jobs and essential services. At this present stage, the Pakenham East train station has not been identified in Plan for Victoria to accommodate additional housing growth as part of Cardinia's Housing Targets. This could change in the future given the train station location. The Victorian Planning Authority (VPA) has not scheduled a review of the land use controls in this area but it is on their list of potential projects.

Studies required

Any changes in land use in the area will require various background technical studies to be completed to substantiate any proposed change and to understand the impacts and demonstrate the benefits of change. There are currently 2 relevant studies underway. The first is flood modelling being done by Melbourne Water with a planned completion date of 2027. The second is the Cardinia Housing Strategy that is planned to be completed by 2029. Both studies will have implications for Deep Creek Reserve and its environs.

Further studies required were identified by the Planning Panel in 2005 and 2017 to provide the strategic justification for changes to the Pakenham Golf Course. This work has yet to be done. Plan Victoria, the Cardinia Planning Scheme, and the Pakenham Structure Plan (which replaces the Pakenham Township Plan) make no specific reference to the Pakenham Golf Course.

The present Cardinia Planning Scheme states the following strategic directions.

- Under Clause 21.01-1 under Cardinia Shire Key Issues and Strategic Vision it states *Ensuring any redevelopment of golf courses has net community benefit and does not adversely impact upon the environment*

- Under Clause 21.04-5 under "Tourism" it states *Facilitate the development of complimentary facilities at golf courses including accommodation, conferencing and dining facilities where appropriate*.

Planning controls on Pakenham Golf Course (PGC)

The Well Played Golf report suggests that significant increases in patronage of the PGC are possible and desirable. The table below shows the potential increases in patronage and the numbers of people and cars this is likely to attract to the PGC.

ABN: 16452195837
178 Osborne Street, Williamstown
Stephen@novaratio.com.au
0417 207 847

Scenario	Description	Patronage	Increase in patronage
Current	Data from 2024/25	14,237 rounds of golf 8,503 driving range users 36,977 people (assumes 2 people per round and 1 per driving range) 22,740 cars (assumes 2 people per car)	
Business as usual	The patronage that can be expected if only repairs and maintenance are carried out on the course	25,000 rounds of golf 15,570 driving range users 65,570 people (assumes 2 people per round and 1 per driving range) 40,570 cars (assumes 2 people per car)	28,593 people 17,830 cars
Limited	The patronage that can realistically be expected with prudent investment	35,000 rounds of golf and 18,000 driving range users 88,000 people (assumes 2 people per round and 1 per driving range) 53,000 cars (assumes 2 people per car)	51,023 people 30,260 cars
Optimal	The optimal patronage that the PGC is capable of supporting	45,000 rounds of golf and 19,250 driving range users 109,250 people (assumes 2 people per round and 1 per driving range) 64,250 cars (assumes 2 people per car)	72,273 people 41,510 cars

ABN: 16452195837
178 Osborne Street, Williamstown
Stephen@novaratio.com.au
0417 207 847

The current planning controls on the PGC need to be reviewed and the implications of increased patronage considered. The potential traffic impact on Cameron Drive and noise and light impact on neighbours immediately west and east of the function centre/bistro and driving range need to be considered. Any intensification of off-course golf activities is likely to include more outdoor nighttime activities (e.g. mini-golf, larger driving range). Increased hospitality and golf entertainment could also increase noise from patrons.

Stephen Thorpe, 26 May 2025

ABN: 16452195837
178 Osborne Street, Williamstown
Stephen@novaratio.com.au
0417 207 847

1. Executive summary

The Deep Creek Reserve Biodiversity Assessment was conducted by Cardinia Shire Council Officers to evaluate the current biodiversity values of the former Pakenham Golf Course site, comparing them to findings from a 2004 assessment. The 83-hectare site, located in Pakenham, spans both the Highland Southern Falls and Gippsland Plain Bioregions and includes a mix of historically developed golf course land and undeveloped wetland and drainage areas.

Key Findings:

- **Vegetation Quality**: The site predominantly features planted tree species with scattered remnant individuals. Vegetation quality ranged from Low to Moderate, with some High-Quality patches, particularly in the northern section. Swamp Scrub and native wetland vegetation were observed, especially along Deep Creek and in southern wetlands.
- **Flora**: Indigenous and exotic species were identified, including significant native species such as Veined Spear Grass (a species of conservation concern). Weed species are widespread but manageable with targeted control.
- **Fauna Habitat**: While no formal fauna survey was conducted, the site provides diverse habitat features including wetlands, tree hollows, and dense understorey vegetation. It supports common bird species and has potential habitat for rare and threatened species such as:
    - Growling Grass Frog
    - Southern Brown Bandicoot
    - Latham's Snipe

ABN: 16452195837
178 Osborne Street, Williamstown
Stephen@novaratio.com.au
0417 207 847

- Ecological Significance: The site functions as a low-quality but important urban biolink node, connecting multiple creeks and wetlands. The southern half, with its permanent and ephemeral wetlands, is particularly valuable for amphibians, birds, and reptiles and is unsuitable for development due to its ecological importance.

Recommendations for Future Work:

- Arborist Report: To map and assess the significance of trees on site.
- Detailed Flora and Fauna Assessment: Including species inventories, vegetation mapping, and analysis of ecological vegetation classes (EVCs).
- Targeted Surveys: For threatened species such as Growling Grass Frog, Southern Brown Bandicoot and Veined Spear Grass.

Conclusion:

The Deep Creek Reserve holds significant biodiversity value, particularly in its wetlands and remnant vegetation. While parts of the site are degraded, others offer critical habitat for native species. Further ecological studies are essential to inform any future land use or development planning.

2. Introduction

Cardinia Shire Council is in the process of evaluating the biodiversity values present at Deep Creek Reserve (the former Pakenham Golf Course) located in Pakenham. The assessment aims to compare the current biodiversity values to the historic assessment completed in 2004 (Brett Lane & Associates 2004). The findings will help guide future decision making for the site, including additional studies needed to inform those decisions.

Study Area Description

The Study Area is approximately 83 hectares in size and is bound by Princes Highway to the north, low density residential and undeveloped land to the east, the railway line to the south and Oaktree Drive to the west. The northern half of the site has been

ABN: 16452195837
178 Osborne Street, Williamstown
Stephen@novaratio.com.au
0417 207 847

historically used as a golf course from approximately 1980s until March 2025. Prior to the golf course, it's understood that the Study Area comprised of modified grazing land held in private ownership, until it was acquired by Council through various subdivision applications and land purchases to create a reserve for municipal purposes. The southern half of the Study Area has not been developed and was likely historically cleared and used for agriculture purposes. Currently, this southern area serves as open space and drainage for the various creeks and wetlands in the area.

The north of the site is dominated by golf course fairways and greens and contains mostly planted trees in the roughs. Some trees on site were determined to be remnant species that were not historically cleared. Majority of the trees on site were determined to be historically planted on site with some becoming quite large and significant in the landscape. Throughout the entire site there are also various wetlands and drainage lines where indigenous aquatic and semi aquatic vegetation has naturally recruited.

The site is unique as it is modelled to be located within both the Highland Southern Falls Bioregion in the north and Gippsland Plain Bioregion to the south. The landscape surrounding the Study Area generally consists of flat terrain that has largely been urbanised to the west and is undeveloped farmland to the east. Various drainage lines and creeks such as Deep Creek, Whiskey Creek and Pakenham Creek traverse the landscape and have an impact on the site, particularly in the southern section.

The Study Area is zoned Public Park and Recreation Zone, with a portion situated within the Floodway Overlay and Development Contribution Plan Overlay- Schdule1.

ABN: 16452195837
178 Osborne Street, Williamstown
Stephen@novaratio.com.au
0417 207 847



Figure 1. Study Area for the purpose of this assessment

ABN: 16452195837
178 Osborne Street, Williamstown
Stephen@novaratio.com.au
0417 207 847

3. Methods

Desktop Review

In addition to a site assessment, a desktop review of relevant information was undertaken as part of this Biodiversity Assessment. This desktop review covered:

- The Existing Pakenham Golf Course Flora and Fauna Assessment prepared by Brett Lane & Associates in 2004
- The Targeted Survey for Growling Grass Frog at the Existing and Proposed Pakenham Golf Course Sites report prepared by Brett Land & Associates in 2005
- Information from ecological databases, including that from 2 km buffer searches of the Victorian Biodiversity Atlas (VBA) and the Federal Environment Protection and Biodiversity Conservation Act 1999 (EPBC Act) Protected Matters Search Tool (PMST), as required
- Information from DEECA's NatureKit to determine likely Ecological Vegetation Classes (EVCs)
- Information from iNaturalist for local species observations.

Site Assessment

A site assessment was undertaken by Cardinia Shire Council's Biodiversity team on the 22nd and 28th of May 2025. These assessments focussed predominantly on the out of play sections of the golf course and areas of important habitat in the south. This assessment focussed on rating the patches on a scale from Low to High. This scale considered the overall biodiversity value of the patch including, tree cover, planted and remnant species, understorey cover, weed cover and presence of habitat for fauna. The scale has been included below:

ABN: 16452195837
178 Osborne Street, Williamstown
Stephen@novaratio.com.au
0417 207 847

Quality of Vegetation	Rating
0-25%	Low
25-50%	Moderate
50-75%	High
75-100%	Very High

The assessment also aimed to map significant and/or large trees, significant flora species observed and unique vegetation types on site such as Swamp Scrub and wetlands that provide important fauna habitat compared to canopy trees.

The aim of the site assessment was to gain a broad understanding of the current conditions of the site and compare them to previous work that has been conducted. It is expected that any future considerations for the site would require an in-depth assessment and analysis additional to this report.

4. Results and Discussion

As outlined above, the Study Area is dominated by mown grassy areas and planted tree roughs. Some wetlands and dams are scattered throughout the site and Deep Creek runs along its eastern boundary.

Flora

The treed areas of the site are dominated by planted species with a mix of species indigenous to the area, Australian natives and exotic species. These trees vary in age from young to older remnant individuals. Various species of Eucalypt were identified on site such as River Red Gum Eucalyptus camaldulensis, Swamp Gum Eucalyptus ovata, Southern Mahogony Eucalyptus botryoides and Blue Gum Eucalyptus globulous. A few Pine Trees Pinus radiata were observed on site amongst plantings. While canopy species are the dominant type, understorey species have also been planted on site such as Wattles Acacia spp., Bottlebrushes Callistemon spp.

ABN: 16452195837
178 Osborne Street, Williamstown
Stephen@novaratio.com.au
0417 207 847

and Paperbarks Melaleuca spp. Some areas on site are dominated by naturally occurring understorey species which provide dense coverage and are representative of the Swamp Scrub ecological vegetation class (EVC 53).

Old dams and waterbodies on site generally contained native wetland species such as Spike rushes Eleocharis spp. and Rushes Juncus spp. These wetlands were generally high quality and provide habitat for water birds, amphibians and mammals. Higher quality waterbodies contained fringing vegetation around the edges that provide additional habitat for fauna species.

The vegetation along Deep Creek in the east of the site contained good cover of Swamp Paperbark *Melaleuca ericifolia* and some scattered trees. While some high threat weeds were present along the waterway, this channel provides good habitat for fauna species.

Small patches of native grasses were observed on site including Veined Spear Grass *Austrostipa rudis*, other Spear Grasses *Austrostipa spp*., Kangaroo Grass *Themeda triandra* and Weeping Grass *Microlaena stipoides*. These patches generally occur in higher quality patches where there is less intrusion from exotic grasses or less frequent mowing. The dominant grass throughout the site is Couch Grass **Cynodon dactylon* which was planted for golfing use.

Small patches of Spear Grass were identified on site, whilst it could not be determined which species it was at the time, it is assumed that some of these individuals could be Veined Spear Grass due to previous records of this species on site. As this species is listed as endangered under the *Flora and Fauna Guarantee Act 1988*, its presence on site is significant and needs to be considered in future directions.

Weed species were dominant throughout the understorey of the site. Whilst most weeds are generally insignificant to the wider area, some significant species were observed on site such as Blackberry **Rubus fruticosus* L. agg, Gorse **Ulex europaeus*, Ragwort **Senecio jacobaea*, Westringia **Westringia spp*., and Sweet Pittosporum #*Pittosporum undulatum*. With weed control works these species could be significantly reduced or eliminated from the site.

* - Denotes exotic species # - Denotes Australian species outside natural range

ABN: 16452195837
178 Osborne Street, Williamstown
Stephen@novaratio.com.au
0417 207 847

While a detailed inventory of species on site was not the purpose of the site assessment, collation of a list of key species helps provide a snapshot into the quality and values of the site.

Figures 1 through Figure 11 show site conditions to the east of the Study Area as it relates to current vegetation condition in areas subject to proposed development impacts.



Figure 2. Patch of planted trees with minimal understorey



Figure 3. Low quality patch



Figure 4. Low quality wetland with no emerging or fringing vegetation



Figure 5. High quality wetland with dense vegetation cover

ABN: 16452195837
178 Osborne Street, Williamstown
Stephen@novaratio.com.au
0417 207 847



Figure 6. Large River Red Gum 170cm



Figure 7. Dense vegetation along Deep Creek



Figure 8. Large dam in centre of Study Area with refuge island



Figure 9. Dense Swamp Scrub along Deep Creek



Figure 10. Low quality grasses in ephemeral area providing habitat



Figure 11. High quality wetland vegetation

ABN: 16452195837
178 Osborne Street, Williamstown
Stephen@novaratio.com.au
0417 207 847

Fauna Habitat

The site was not subject to fauna survey however it is expected that a range of fauna would utilise the habitat within the Study Area, including the wetlands, drainage corridors and trees. This includes bird species that are commonly recorded in the local area based on searches of the Victorian Biodiversity Atlas (VBA) such as Sulphur-crested Cockatoo *Cacatua galerita*, Laughing Kookaburra *Dacelo novaeguineae*, Australian Magpie *Gymnorhina tibicen*, New Holland Honeyeater *Phylidonyris novaehollandiae*, Crimson Rosella *Platycercus elegans*, and Grey Fantail *Rhipidura albiscarpa*. Hollow bearing trees observed on site provide nesting and shelter for fauna that utilise hollows.

Wetlands and creeks provide habitat for aquatic and semi aquatic species such as Spotted Marsh Frog *Limnodynastes tasmaniensis*, Common Froglet *Crinia signifera*, Striped Marsh Frog *Limnodynastes peronii* and Growling Grass Frog *Litoria raniformis* as well as other species that are typical around water sources.

It is considered likely that larger predatory birds such as raptors and owls utilise the site. This was partially confirmed on site with the presence of significant whitewash underneath a stand of trees in the north of the site and a large nest being observed in another large tree near the centre of the site. Predatory birds may utilise the site for nesting, shelter and hunting.

The large dam near the centre of the Study Area (Figure 8) provides excellent habitat for waterfowl and other birds with large numbers being observed around and in the water. Additionally, the island in the centre of the dam provides a safe refuge for birds from predators such as foxes and cats. This dam is mapped as a significant wetland due to its size and habitat potential on site.

The southern half of the Study Area contains many wetlands and drainage lines that contain native vegetation. These areas provide significant habitat for a multitude of species most notably frogs and birds however, it would also be expected that reptiles would utilise these areas also. Some areas were mapped as low quality as they were dominated by exotic grasses. Whilst generally low quality, this habitat still provides significant space for Growling Grass Frogs to overwinter and also provide wetter areas for other amphibians. These areas also provide ephemeral habitat for birds and amphibians which is generally lacking on site.

ABN: 16452195837
178 Osborne Street, Williamstown
Stephen@novaratio.com.au
0417 207 847

The main focus with regards to fauna during the assessment was the consideration of the site's potential to provide fauna habitat. The habitat observed within the site included:

- leaf litter
- tree canopies
- tree hollows
- understorey vegetation
- grassy understorey vegetation
- wetlands
- creeks.

The site has potential to provide habitat for several rare and threatened species such as Growling Grass Frog *Litoria raniformis*, Southern Brown Bandicoot *Isoodon obesulus* and Latham's Snipe *Gallinago hardwickii*.

Growling Grass Frog

Growling Grass Frogs typically occupy areas with a permanent water source that contains fringing and submerged vegetation for shelter. They require dense understorey vegetation for protection during colder months while they overwinter. Growling Grass Frogs also have preference for rocks or bare ground that they can use for basking.

Growling Grass Frog has potential to occupy the site in the wetlands, creek, drainage lines and thick vegetation for overwintering. There are 17 historical records of Growling Grass Frog on site and in the immediate surrounding area on the VBA which indicates that they are likely present on site or in the adjacent wetlands and have a high likelihood of occurring on site.

Southern Brown Bandicoot

Southern Brown typically inhabits areas of dense vegetation that includes tussock grasses, shrubs and densely growing understorey trees such as Swamp Scrub which provides them with shelter from predators.

ABN: 16452195837
178 Osborne Street, Williamstown
Stephen@novaratio.com.au
0417 207 847

Southern Brown Bandicoot has been recorded in the immediate vicinity of the Study Area, most recently being observed in habitat supporting small number of Bandicoots both east and west of the Princess Freeway, including around Deep Creek Reserve and the new Pakenham East Station. Anecdotally Bandicoots have also been observed by residents within the vicinity of the Deep Creek outdoor play space.

Given the species known local presence and mobility, there is a moderate likelihood of the species utilising Deep Creek Reserve as core habitat and for landscape connectivity into surrounding Biolinks that connect to the site to and from the wider landscape. While the site currently lacks any significant permanent core habitat for Southern Brown Bandicoot due to the lack of protective understorey vegetation, there are a few small pockets of suitable habitat such as intact Swamp Scrub patches and the dense vegetation along Deep Creek.

Latham's Snipe

Latham's Snipe is generally widely dispersed in low numbers across wetland and grassland areas. Their preferred habitat consists of open freshwater or brackish wetlands with cover nearby, particularly areas of wet tussock grassland and other dense ground vegetation.

During the day snipe prefer to roost in grass and weeds near water and at night they disperse to feed in nearby wet paddocks, ditches and other open flooded areas. The distance they move nightly to feed is unknown; however, shorebirds tend to roost near their feeding habitats to reduce the amount of energy used in nightly transit (SWIFFT 2024).

The site contains some habitat suitable for Latham's Snipe to utilise such as the waterbodies and dense vegetation within and around some wetlands. There are several incidental sightings of Latham's Snipe in the immediate vicinity of the Study Area meaning that they may occasionally use the site for foraging or shelter.

Future Work

Prior to any development or further consideration, future work on site should occur to provide a more in depth understanding of the site's values. This future work should involve the following and any other assessments deemed appropriate:

ABN: 16452195837
178 Osborne Street, Williamstown
Stephen@novaratio.com.au
0417 207 847

Arborist Report

An arborist report should be prepared for the site that maps the trees on site and provides context on whether they are planted or remnant individuals, comments on their significance and ability to provide habitat for fauna on site. An arborist report would also provide an accurate map of tree locations on site.

Detailed Flora and Fauna Assessment

A detailed flora and fauna assessment prepared by a suitably qualified ecologist would provide a more detailed review of the sites flora and fauna values. It would be expected that this would include:

- a full list of species observed on site;
- accurate mapping of native vegetation patches;
- analysis of EVCs present on site;
- likelihood of rare and threatened species present on site; and
- other detailed information relevant to the site.

Data collected by the ecologists could then be used in future for any planning and design matters for the site.

Flora and Fauna Targeted Surveys

It is expected that a range of rare and threatened species protected under the Federal legislation Environment Protection and Biodiversity Conservation Act 1999 and State Legislation Flora and Fauna Guarantee Act 1988 are present on site or have a high likelihood of utilising the site in some capacity. It would be expected that these species are highlighted within detailed reports prepared by ecologists. Targeted surveys for the species identified should then be undertaken to determine their presence on site.

Additional to the fauna species highlighted within this report that may occupy the site it is recommended that a targeted survey is conducted for Veined Spear-grass *Austrostipa rudis* and any other significant species picked up as part of detailed reporting.

Previous Reports

ABN: 16452195837
178 Osborne Street, Williamstown
Stephen@novaratio.com.au
0417 207 847

The report produced by Brett Lane & Associates in 2005 identified several waterbodies that would be suitable for Growling Grass Frog to inhabit and one individual being observed within a wetland within the Golf Course. Since then, potential habitat for Growling Grass Frog has increased with there generally being more fringing vegetation and within most waterbodies compared to 2005.

The Biodiversity Assessment produced in 2004 by Brett Land & Associates identified multiple areas where remnant trees and significant habitat was located within the golf course. This Study aimed to verify and update these results. Generally, the results collected in 2025 were still consistent with the report from 2005 with remnant trees being observed in the same locations and Swamp Scrub being present in wetter areas of the site. Currently, there is generally more Swamp Scrub present along Deep Creek and some of the waterbodies compared to 2005 however, some Swamp Scrub mapped in 2005 has since been removed from some of the roughs in the north of the site.

The wetlands in the south of the Study Area have generally increased in size compared to 2005 with significant growth observed in the west of the site. While the east was lower quality, it still contained scattered native plants that represent wetland communities and still provides habitat for multitudes of species.

ABN: 16452195837
178 Osborne Street, Williamstown
Stephen@novaratio.com.au
0417 207 847



ABN: 16452195837
178 Osborne Street, Williamstown
Stephen@novaratio.com.au
0417 207 847

5. Summary

The Study Area mostly contains planted tree species with scattered remnant individuals. Patches of vegetation were generally considered Low to Moderate quality with a few being High Quality. These patches serve as habitat for a range of fauna species and have potential to shelter some rare and threatened species.

The site serves as a low quality but important urban biolink node that services multiple creeks and wetlands which also contains significant tree canopy cover. Some vegetation across the Study Area is deemed to be native vegetation patches and would require permits and offsets to remove.

Additional investigations regarding flora and fauna values on site are likely required before any work is conducted on site.

Within the former golf course, the biodiversity and habitat values were generally higher in the northern half of the site compared to the south. The northern portion of the golf course contained the most significant trees and habitat compared to the south which contained minimal planted trees and sparse understorey.

The southern half of the Study Area contains significant habitat for birds, amphibians and reptiles due to is containing permanent and ephemeral wetlands throughout the grassy areas. These areas would generally not be suitable for any development due to the significance and size of the habitats it provides for many fauna species.

6. References

Brett Lane & Associates (2004) Existing Pakenham Golf Course Flora and Fauna Assessment. Carlton North. Victoria

Brett Lane & Associates (2005) Targeted Survey for Growling Grass Frog at the Existing and Proposed Pakenham Golf Course Sites. Carlton North, Victoria.

DELWP (2017) Guidelines for the removal, destruction and lopping of native vegetation. Department of Environment, Land, Water and Planning, Government of Victoria, Melbourne.

ABN: 16452195837
178 Osborne Street, Williamstown
Stephen@novaratio.com.au
0417 207 847

DEPI (2014) Advisory list of rare or threatened plants in Victoria - 2014. Department of Environment and Primary Industries, Government of Victoria.

SWIFFT (2024) Latham's Snipe. State Wide Integrated Flora and Fauna Teams.

Version Control

Version	Date	Author	Reviewer	Notes
0.1	27/05/2025	Nathaniel Knight – Environment Assessment Officer	Ryan Harris – Principal Environment Planner	Internal Review
0.2	27/05/2025		Simon King – Coordinator Biodiversity	
1.0	27/05/2025		Ryan Harris – Principal Environment Planner	Internal Review

ABN: 16452195837
178 Osborne Street, Williamstown
Stephen@novaratio.com.au
0417 207 847

Deep Creek Golf Club - Planning Scheme considerations

Advice in response to email from Stephen Thorpe dated 8/5/2025 which includes:

> *I have attached the report prepared by a golf consultant. They were asked to explore 3 scenarios and provide advice on their feasibility. In particular, it would be good to know what approvals might be required if the following was to happen:*
>
> *May create off-course golf entertainment offerings, such as a larger driving range (with technology, hospital bays and outfield lighting), new mini-golf course, plus other destination attractions that will compliment the existing hospitality and community facilities.*
>
> *It would be great to have your view on current controls and what will be needed for the 'optimal' scenario.*

Discussion

There are multiple zones and overlays that apply to the site. These generate different triggers, planning permit requirements, specific application considerations, referral to State agencies and the preparation of numerous supporting technical reports.

A threshold issue is whether the use & development is to be conducted *for or on behalf* of the public land manager. The primary zone purpose is to recognise areas for public recreation and open space. Future use or development should demonstrate how they respond to this public purpose. Under the zone a permit is required for uses and buildings & works other than uses conducted *for or on behalf* of the public land manager.

It is understood that the optimal scenario involves Council retaining ownership but with private intervention to develop and manage the site. The specifics of the contractual arrangements, Councils ongoing role & control and the public access would need to be further understood and may benefit from legal review to confirm the status of exemptions from planning.

ABN: 16452195837
178 Osborne Street, Williamstown
Stephen@novaratio.com.au
0417 207 847

The zone enables permits to be granted for use and development by others (other than the public land manager). The preparation, exhibition and approval by Council of a *master plan* as an incorporated document into the planning scheme is an option and would increase the level of certainty for the community.

If the long-term ongoing land use will no longer serve the public use intention, a review of the underlying zoning may be appropriate.

Existing Planning permits

The history of planning approvals for the site are outlined below:

62 Cameron Way

New | Export All | Update Stat Days | Clear Filters | Publish to Web

APP NO	ASSESS NO	FILE NO	LODGED	SITE ADDRESS	LOCALITY	STATUS	PLANNER	TYPE	REASON FOR PERMIT	DECISION	DECISION DATE
				62 cameron way							
T190445	5000024458		30-Jul-2019	62 Cameron Way	Pakenham	Application Complete	Matthew Schreuder	Permit	Liquor Licence	Issued	12-Sep-2019
GE190764	5000024458		20-Sep-2019	62 Cameron Way	Pakenham	Closed	Divyaa Sundaravadiv	Planning Enquiry	Notification of application to relocate an existing liquor licence		02-Oct-2019
T170353	5000017441		07-Jun-2017	62 Cameron Way	PAKENHAM	Application Complete	Dean Haeusler	Permit	Removal of vegetation (one indigenous tree)	Issued	10-Jul-2017
T170318	5000017441		29-May-2017	62 Cameron Way	PAKENHAM	Withdrawn	Dean Haeusler	Permit	Removal of one indigenous tree (acacia species)	Withdrawn	11-Jun-2017
T170035	5000017441		31-Jan-2017	62 Cameron Way	PAKENHAM	Withdrawn	Mary Rush	Permit	Vegetation Removal	Withdrawn	02-Mar-2017
T160794 - PC2	5000017441		28-May-2019	62 Cameron Way	PAKENHAM	Planner Assessment	Dean Haeusler	Plans To Comply	Development of a Place of Assembly (Golf Club and Community Facility) and Wetlands		
T160794 - PC1	5000017441		02-Mar-2018	62 Cameron Way	PAKENHAM	Plans to Comply Issued	Jason Gilbert	Plans To Comply	Amended plans to comply with conditions 1 and 9 of Planning Permit T160794	Issued	02-Mar-2018
T160794	5000017441		19-Jan-2017	62 Cameron Way	PAKENHAM	Application Complete	Hugh Pierce	Permit	Development of a Place of Assembly (Golf Club and Community Facility) and Wetlands	Issued	23-Mar-2017

25 Oaktree Drive

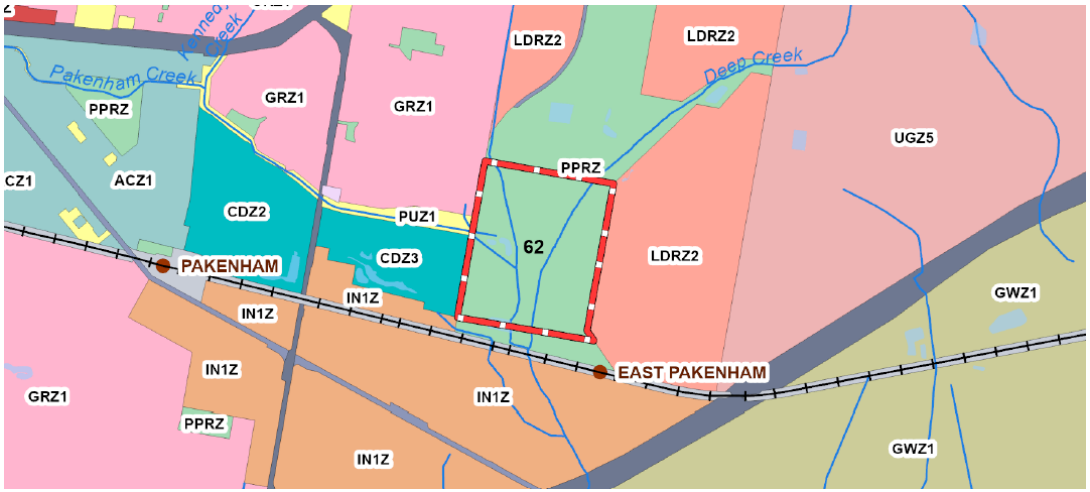
ABN: 16452195837
178 Osborne Street, Williamstown
Stephen@novaratio.com.au
0417 207 847

New | Export All | Update Stat Days | Clear Filters | Publish to Web

APP NO	ASSESS NO	FILE NO	LODGED	SITE ADDRESS	LOCALITY	STATUS	PLANNER	TYPE	REASON FOR PERMIT	DECISION	DECISION DATE
				62 cameron way							
T190445	5000024458		30-Jul-2019	62 Cameron Way	Pakenham	Application Complete	Matthew Schreuder	Permit	Liquor Licence	Issued	12-Sep-2019
GE190764	5000024458		20-Sep-2019	62 Cameron Way	Pakenham	Closed	Divyaa Sundaravadiv	Planning Enquiry	Notification of application to relocate an existing liquor licence		02-Oct-2019
T170353	5000017441		07-Jun-2017	62 Cameron Way	PAKENHAM	Application Complete	Dean Haeusler	Permit	Removal of vegetation (one indigenous tree)	Issued	10-Jul-2017
T170318	5000017441		29-May-2017	62 Cameron Way	PAKENHAM	Withdrawn	Dean Haeusler	Permit	Removal of one indigenous tree (acacia species)	Withdrawn	11-Jun-2017
T170035	5000017441		31-Jan-2017	62 Cameron Way	PAKENHAM	Withdrawn	Mary Rush	Permit	Vegetation Removal	Withdrawn	02-Mar-2017
T160794 - PC2	5000017441		28-May-2019	62 Cameron Way	PAKENHAM	Planner Assessment	Dean Haeusler	Plans To Comply	Development of a Place of Assembly (Golf Club and Community Facility) and Wetlands		
T160794 - PC1	5000017441		02-Mar-2018	62 Cameron Way	PAKENHAM	Plans to Comply Issued	Jason Gilbert	Plans To Comply	Amended plans to comply with conditions 1 and 9 of Planning Permit T160794	Issued	02-Mar-2018
T160794	5000017441		19-Jan-2017	62 Cameron Way	PAKENHAM	Application Complete	Hugh Pierce	Permit	Development of a Place of Assembly (Golf Club and Community Facility) and Wetlands	Issued	23-Mar-2017

The existing permits are limited in scope as the uses; buildings & works have been undertaken by or on behalf of Council (as the relevant land manager) and therefore exempt from permit requirements. For this reason, the permits do not appear to include restrictions on the use or their intensity i.e. golfing/use or other community activities.

Public Park and Recreation Zone



ABN: 16452195837
178 Osborne Street, Williamstown
Stephen@novaratio.com.au
0417 207 847

The zone purpose is to recognise areas for public recreation and open space. Future use or development need to demonstrate how they respond to this purpose.

A permit is required for uses and buildings & works other than uses conducted for or on behalf of the public land manager.

Key decision guidelines include:

- The comments of any public land manager or other relevant land manager having responsibility for the care or management of the land or adjacent land.
- Whether the development is appropriately located and designed, including in accordance with any relevant use, design or siting guidelines.

The optimal scenario appears to represent a significant uplift in activity and development, will be subject to public engagement (whether through planning or not) and warrant specific considerations of the following:

- Amenity impacts – acoustics, light, & visual
- Design & built form
- Landscape response
- Carparking impacts
- Traffic management

The zone provides the opportunity for the preparation and approval of an incorporated plan (i.e. master plan). The incorporated plan would be subject to exhibition and approval by Council and provides benefits for transparency and certainty.

Will the development and use be conducted *For & On behalf of*

This is a threshold question. The words *by or on behalf of* need to be interpreted regarding the particular statutory charter of the public land manager under its governing legislation and indicate that the use or development must be undertaken by the public land manager itself or by some other person or entity having a direct representative interest or relationship with the public land manager.

ABN: 16452195837
178 Osborne Street, Williamstown
Stephen@novaratio.com.au
0417 207 847

Where a use is conducted by on or behalf of a public land manager a permit is not required.

The issue of private use of public land has been considered by VCAT and predecessors from time to time. Three reported cases that demonstrate the considerations include:

- In *City of Preston v Minister for Planning and Environment* (1988) 1 AATR 172 (editorial comment 1 AATR 171), the Supreme Court ruled that the use of land reserved for public open space by a professional soccer club, which formed part of the national soccer league, was not a use of the land for public purposes. Accordingly, the use was not 'as of right' and required a land use permit.

  The Court placed emphasis on the gradual metamorphosis of the club from a local amateur soccer club to a professional body engaged in nationally televised sport, with its concomitant exclusion of the land in question from public access and public use. The Court considered that the land was used more for the entertainment of the paying club than the promotion of public recreation, fitness or health.

- In *Leahy v City of Camberwell* [1973] VR 589, it was proposed to construct private tennis courts on part of a reserve. The 'test' formulated in that case was described as follows:

  I am clearly of the opinion that a use of land by the members of a private club to the exclusion of the public at large would not, so long as it was being so used, answer the test of a "public" use within the foregoing description. In this context the public use of land requires that it be available for use by the public generally as of right, although consistently with this, such use by the public may be subject to certain restrictions and regulations:

  However, the Court affirmed that the Responsible Authority had the power to grant a permit and ought consider whether there would be a benefit or detriment at large.

- In *Vincent v City of Heidelberg & Yarra Valley Hockey Club* (1983) 1 PABR 23, the Tribunal included a requirement that a sign must clearly indicate that a club room associated with a hockey club was available for hire by the general public.

ABN: 16452195837
178 Osborne Street, Williamstown
Stephen@novaratio.com.au
0417 207 847

It is understood that the optimal scenario involves Council retaining ownership but facilitates private intervention to develop and manage the site. The specifics of the contractual arrangements, Councils ongoing role, control and the public access would need to be further understood and may benefit from legal review to confirm the status of permit exemptions.

The following overlay/s and specific controls are also relevant to the use & development of the land (or parts thereof)

TRZ2 - Principal Road Network

The site abuts the Principal Road network to the north (Princes Highway) and any access or traffic volume considerations will require permits and referral to DTP.

Development Contributions Overlay

To identify areas which require the preparation of a development contributions plan for the purpose of levying contributions for the provision of works, services and facilities before development can commence.

This development contributions plan applies to the south portion of the land as referenced in the Pakenham Township Development Contributions Plan, December 2023.

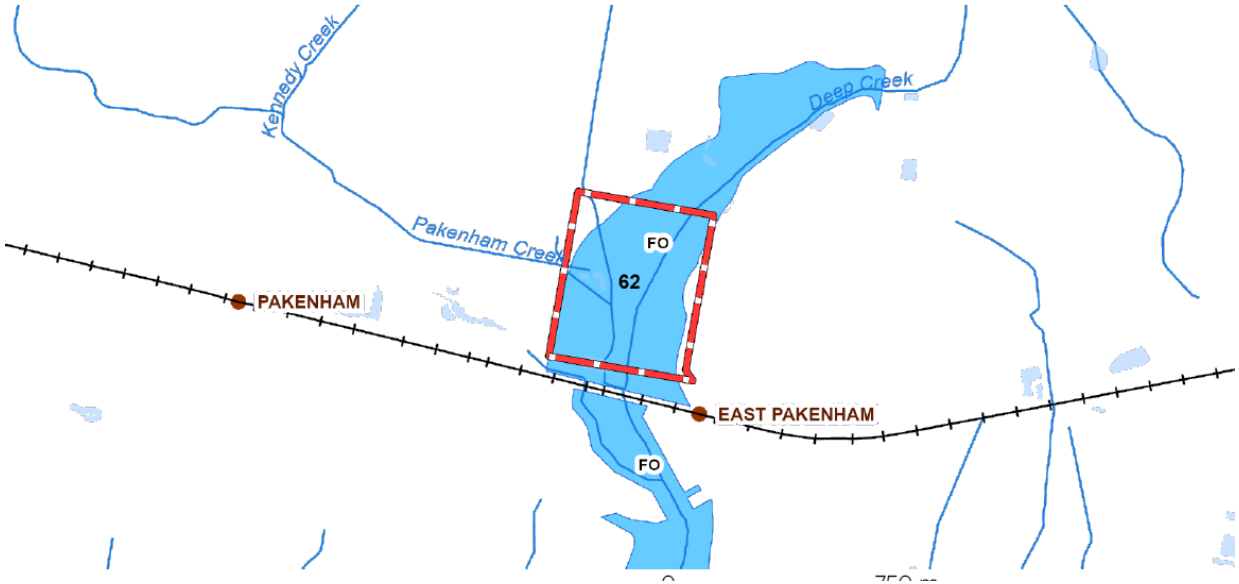
Floodway Overlay

The purpose is to identify waterways, major floodpaths, drainage depressions and high hazard areas which have the greatest risk and frequency of being affected by flooding.

A permit is required to construct a building or to construct or carry out works.

You should consider engaging at a preliminary stage of your consideration with Melbourne Water on your proposals. An application must be accompanied by a flood risk report.

ABN: 16452195837
178 Osborne Street, Williamstown
Stephen@novaratio.com.au
0417 207 847



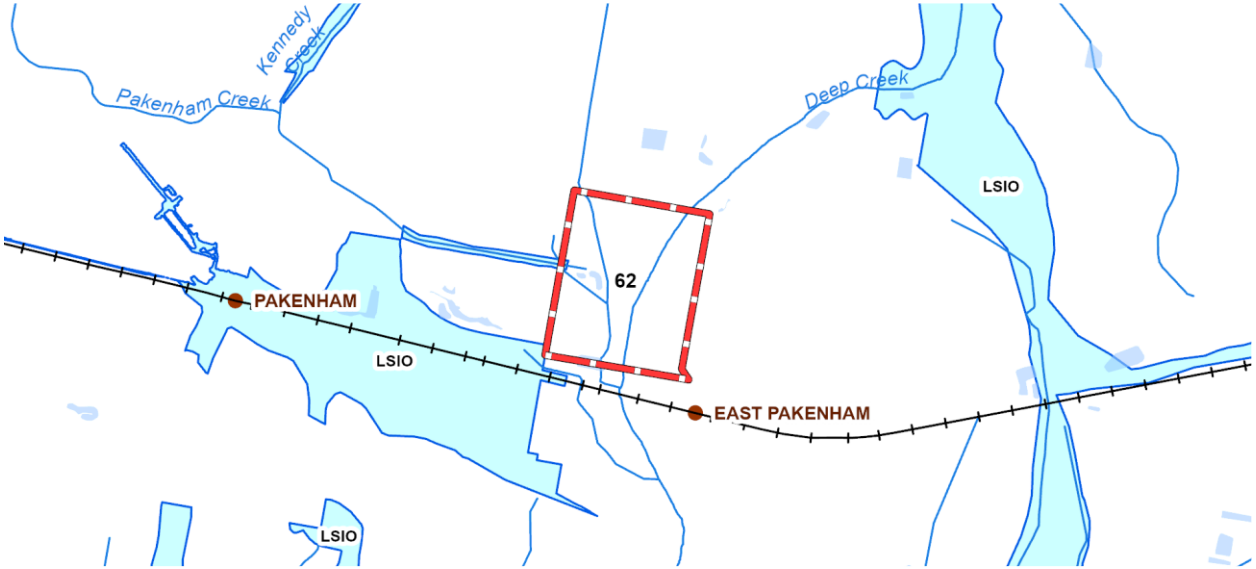
Land Subject to Inundation Overlay

To identify flood prone land in a riverine or coastal area affected by the 1 in 100 (1 per cent Annual Exceedance Probability) year flood or any other area determined by the floodplain management authority.

A permit is required to construct a building or to construct or carry out works.

You should consider engaging at a preliminary stage of your consideration with Melbourne Water on your proposals.

ABN: 16452195837
178 Osborne Street, Williamstown
Stephen@novaratio.com.au
0417 207 847



Vegetation Protection Overlay

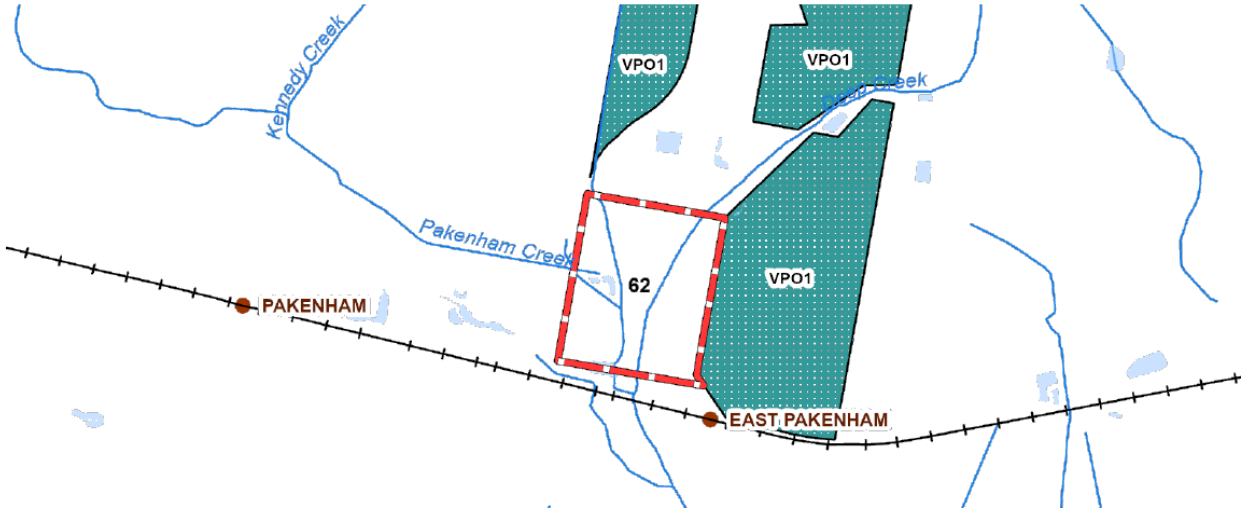
The purpose of the overlay includes:

- To protect areas of significant vegetation.
- To ensure that development minimises loss of vegetation.
- To preserve existing trees and other vegetation.

A permit is required to remove, destroy or lop any vegetation.

To respond to the decision guidelines, you will need to engage technical experts to map, demonstrate avoidance or minimisation and assess the impacts on vegetation.

ABN: 16452195837
178 Osborne Street, Williamstown
Stephen@novaratio.com.au
0417 207 847



Area of Aboriginal Cultural Heritage Sensitivity

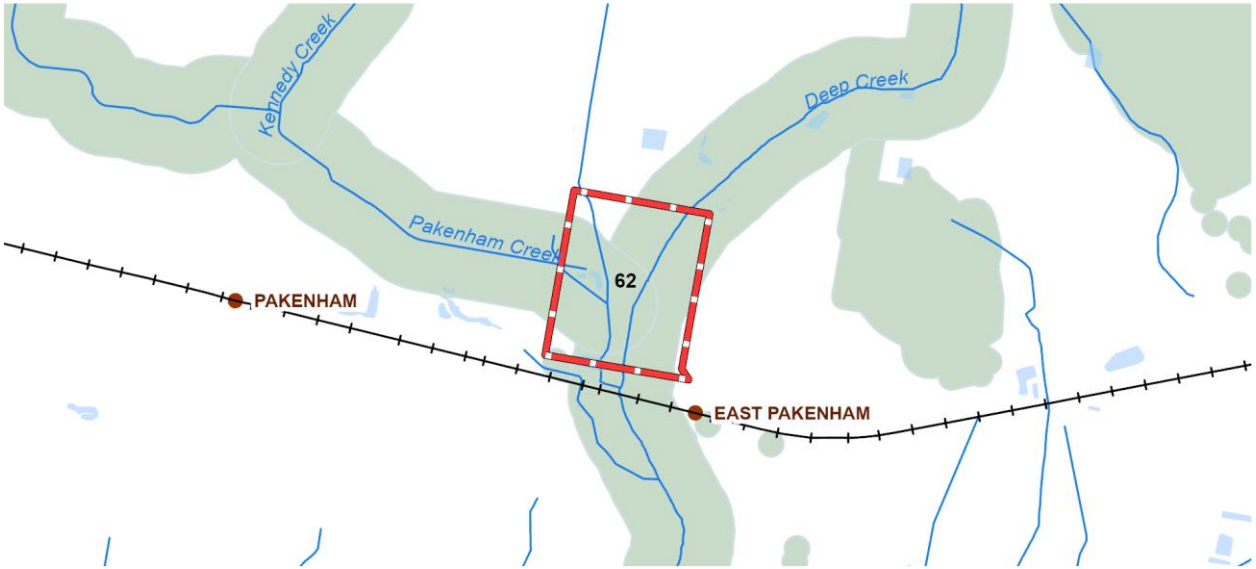
The site is located within an area of cultural heritage sensitivity as defined under the Aboriginal Heritage Regulations 2018

Under the Aboriginal Heritage Regulations 2018, 'areas of cultural heritage sensitivity' are one part of a two part trigger which require a 'cultural heritage management plan' be prepared where a listed 'high impact activity' is proposed.

The proposed scenario are likely to be determined as high impact activities.

Under the Aboriginal Heritage Act 2006, where a cultural heritage management plan is required, planning permits, licences and work authorities cannot be issued unless the cultural heritage management plan has been approved for the activity.

ABN: 16452195837
178 Osborne Street, Williamstown
Stephen@novaratio.com.au
0417 207 847

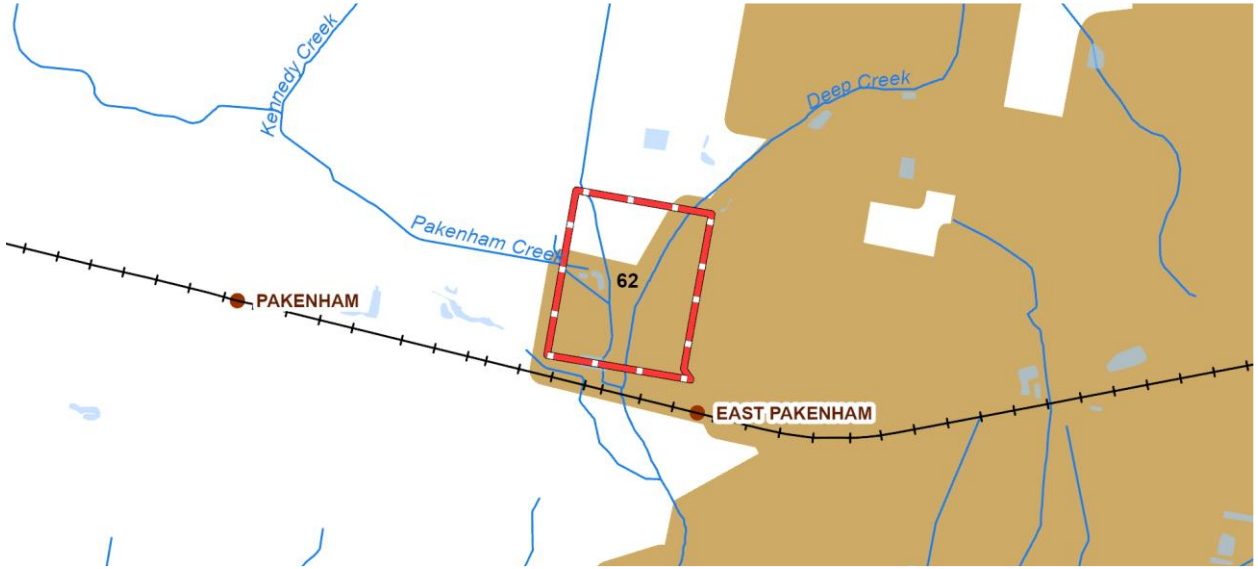


Designated Bushfire Prone Area

This property is in a designated bushfire prone area. Special bushfire construction requirements apply to the part of the property mapped as a designated bushfire prone area (BPA).

The relevant building surveyor determines the need for compliance with the bushfire construction requirements.

ABN: 16452195837
178 Osborne Street, Williamstown
Stephen@novaratio.com.au
0417 207 847



ABN: 16452195837
178 Osborne Street, Williamstown
Stephen@novaratio.com.au
0417 207 847