Submission to

Casey Fields South Employment &Devon Meadows PSP, DSS & Amendment C295case

1490 Ballarto Road, Devon Meadows

Client
Cosentino Group

Issued
31 March 2025

Beveridge Williams

Executive Summary

The landowner of 1490 Ballarto Road, Cosentino Group, make this submission to the Casey Fields South Employment and Devon Meadows Precinct Structure Plan (CFS&DM PSP) and Planning Scheme Amendment C295case.

Cosentino Group is supportive of the proposed applied Industrial 3 Zone across the entirety of their site. They are however concerned about a number of matters which could impact upon the site's full development potential. Accordingly, this submission makes the following key points:

- Many of the trees designated for retention on the site have been lawfully removed. The trees remaining on site and proposed for retention in accordance with PSP Plan 13 do not support the functional and efficient use of land. The masterplan for the property that was prepared to inform the development proposal associated with the now established service station clearly articulates the future road connections through the property to facilitate appropriate vehicle movements, including truck movements.
- It is submitted that Plan 13 of the PSP be updated to remove all trees from the site to reflect its current status, and to eliminate the unnecessary need for a planning permit to remove the remaining native vegetation as part of a future planning permit application post PSP gazettal.
- The lack of transparency regarding the 12 identified places of Aboriginal Cultural Heritage, creates considerable uncertainty about the development potential of properties within the PSP, particularly if the recommendations noted in the Aboriginal Cultural Heritage Impact Assessment (ACHIA) are to be applied to this PSP through future Cultural Heritage Management Plans. Specifically, the protection of areas of cultural heritage within heritage and conservation parks. This ambiguity complicates planning and decision-making for landowners and developers in the area.
- 1490 Ballarto Road does not form part of the CFS&DM drainage scheme area but instead falls under the Clyde Township Drainage Scheme. Accordingly, the staging requirements outlined in R27 and PSP Plan 9 – Infrastructure and Development Staging should not be applied to the subject property.

Introduction

Beveridge Williams has prepared this submission to the CFS&DM PSP and Planning Scheme Amendment C295case on behalf of Cosentino Group who own the land at1490 Ballarto Road, Clyde. The submission relates to the land identified as CF-09 in the PSP Land Use Budget, which is approximately 1.62 hectares in size. The property is situated in the north-eastern corner of the Casey Fields South Employment Precinct, with access from Clyde – Five Ways Road and Ballarto Road.

The draft PSP, as it relates to the Cosentino Group land, proposes that the site is used for Light Industry. a site to support primarily used to support drainage infrastructure to facilitate the development of the entire Devon Meadows PSP. A number of trees are also nominated for retention on the subject land.

The planning scheme amendment known as C295case principally seeks to implement the draft Casey Fields South (Employment) and Devon Meadows PSP. Amendment C295case seeks to apply several planning controls to 1490 Ballarto Road to facilitate future use and development in accordance with the PSP Plan 2: Place Based Plan. The proposed controls include applying the:

- Inserts UGZ15 and rezones the precinct from Farming Zone 3 (FZ3), Urban Floodway Zone (UFZ) and UGZ to UGZ15.
- Amends the Schedule to Clause 52.17 Native Vegetation to include native vegetation removal exemptions for the Casey Fields South (Employment) and Devon Meadows PSP.
- Amends the Schedule to Clause 72.03 to include the revised list of maps in the Casey Planning Scheme.
- Amends the Schedule to Clause 72.04 Schedule to the Documents Incorporated in this Planning Scheme to incorporate one new document: *Casey Fields South (Employment) and Devon Meadows Precinct Structure Plan, February 2025*

Figure 1: Extract from PSP Plan 2: Place Based Plan (VPA 2025)

Subject Site and Surrounds

The subject site at 1490 Ballarto Road is located less than 1km south west from the existing Clyde township area and approximately 6km from the suburb of Cranbourne. The site is located to the south western corner of Ballarto Road and Clyde Five-Ways Road. The site is irregular in shape following the excision of the future Ballarto Road road reserve and the intersection with Clyde - Five Ways Road. The subject land has a total area of 16,204sqm (1.6204ha). The property is currently developed with a service station, located on the north-eastern quadrant of the site. A large dwelling and associated outbuilding are located on the western half of the property (Figure 2).

The subject site adjoins Ballarto Road along its northern boundary which is earmarked in the Casey Fields South Residential PSP as a 34m wide secondary arterial road. *Belmond on Clyde* Estate is located on the north side of Ballarto Road, adjacent to the subject land and accommodates a newly established residential community. Land further north along Clyde Five-Ways Road and Berwick Cranbourne Road is generally associated with developing residential estates, including Selandra Rise and Highgrove Estate. Berwick Cranbourne Road provides an arterial link to the Princes Freeway and in turn the Melbourne CBD.

Directly abutting the site to the east is Clyde Five-Ways Road. Clyde Five-Ways Road is designated to function as the major north south road servicing the growth areas within this location. Clyde-Five Ways Road is expected to be upgraded to a six lane secondary arterial road in the future, as per the Clyde DCP to support the growing population associated with the surrounding PSPs.

To the south of the site, the land is part of the Casey Fields South Industrial Precinct. Further south, beyond the South Gippsland Highway, is the Devon Meadows Precinct. Many of the properties within Casey Fields South and Devon Meadows are used for agriculture or rural-residences. The precincts also accommodate a number of existing industries and the well-established Lighthouse Chirstian College.

The land to the west of 1490 Ballarto Road, north of Ballarto Road, is part of the Casey Fields South Residential PSP and the Cranbourne East PSP. These areas have been largely developed according to the designated land uses in the respective PSP. Further west lies the Cranbourne Botanical Gardens and the Cranbourne Racing Track precinct.

Figure 2: Site Context Aerial (Metro Maps 2025)

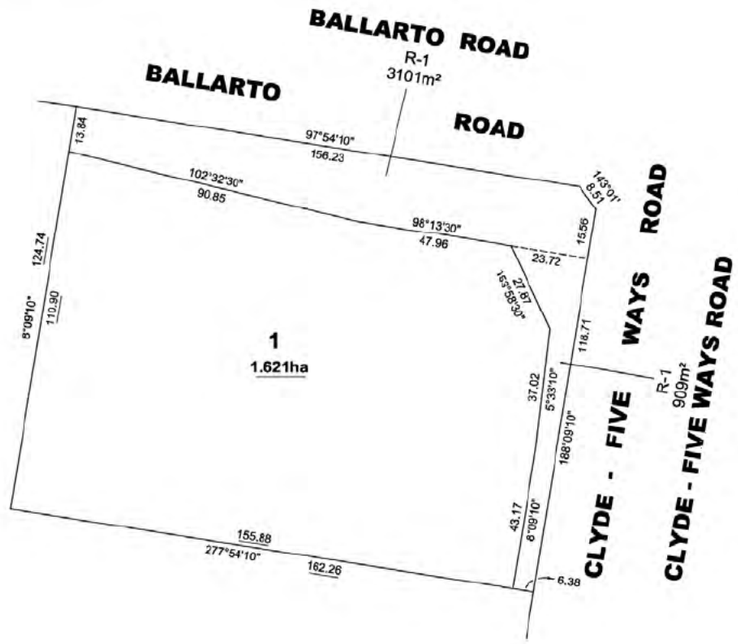
Property Details	
Address	1490 Ballarto Road
Formal Description	Lot 1 on Plan of Subdivision 836534Y
Municipality	City of Casey
Site Area	1.62ha
Zone	Urban Growth Zone (UGZ)
Overlay	None
GAIC	Yes
Area of Aboriginal Cultural Heritage Sensitivity	Yes
Bushfire Prone Area	Yes
Melbourne Strategic Assessment Area	Yes

Title Details

1490 Ballarto Road is formally known as Lot 1 on PS836534Y.

A Section 45 notice is registered to the Certificate of Title, which relates to the application of the Melbourne Strategic Assessment Area. A Section 201UB is also registered on the Certificate of Title and relates to GAIC liability.

Figure 3: Extract from Title – Lot 2 PS836534Y



Existing Planning Controls

The land is located within the City of Casey and is subject to the provisions of the Casey Planning Scheme. The site is zoned Urban Growth Zone (UGZ), and no schedule currently applies.

Clause 37.07 Urban Growth Zone

The site is subject to the Urban Growth Zone (UGZ). The purpose of the Urban Growth Zone is:

- *To manage the transition of non-urban land into urban land in accordance with a precinct structure plan.*
- *To provide for a range of uses and the development of land generally in accordance with a precinct structure plan.*
- *To contain urban use and development to areas identified for urban development in a precinct structure plan.*
- *To provide for the continued non-urban use of the land until urban development in accordance with a precinct structure plan occurs.*
- *To ensure that, before a precinct structure plan is applied, the use and development of land does not prejudice the future urban use and development of the land.*

Pursuant to the current controls at Clause 37.07-1, a permit is not required for a dwelling, granted it is the only dwelling on the lot and the lot is at least 40 hectares. In accordance with Clause 37.07-3, a permit is required to subdivide land.

Overlays

No overlays currently apply to the subject land.

Figure 4: Existing UGZ (Source: VicPlan)

Draft Casey Fields South (Employment) and Devon Meadows PSP & Proposed Planning Controls

Casey Fields South

The draft Casey Fields South (Employment) and Devon Meadows PSP combines a residential precinct and an employment precinct into a single PSP. Both precincts are distinct in character and physically separated by the established road network.

The draft PSP describes the Vision for Casey Fields South as a flexible, next generation employment Precinct that is anticipated to facilitate approximately 5,370 jobs. The urban structure is defined as robust and adaptable to support a diverse mix of industry and business to grow and innovate.

The subject site is located in the north-east corner of the Casey Fields South Precinct and is identified as property ID# CF09. The draft PSP nominates the entire site for light industrial use. The PSP also identifies vegetation in the form of scatted trees across the site. The PSP does not identify any other distinctive features or proposed land use outcomes for Property ID #CF09. The subject land forms part of Stage 1b.

Proposed Planning Controls

The draft planning scheme amendment proposes to apply the Urban Growth Zone Schedule 15 (UGZ15). Under the proposed UGZ15, the applied zone designated for the subject land is the Industrial Zone Schedule 3 (IN3Z) to facilitate light industrial uses. Cosentino Group is supportive of the proposed applied Industrial 3 Zone across the entirety of their land.

The PSP identifies trees to be retained on site and the retention of these trees is proposed to be enforced through an updated Casey Planning Scheme Clause 52.17 Schedule. Following the recent lawful removal of a number of trees from the site in accordance with current exemptions under clause 52.17-7 of the Casey Planning Scheme, it is requested that Plan 13 of the PSP be updated to reflect these changes. Our client also requests that the remaining 5 native trees on site be removed from PSP Plan 13 to avoid the unnecessary need for a planning permit to remove this vegetation as part of a future planning permit application post PSP gazettal. Specifically, a masterplan prepared for the entire site to inform a the previously approved service station design and layout is significantly compromised from a road network and traffic movement perspective, particularly from a truck movement and industrial built form (maximum) viability perspective if the trees were to be retained. We note that the most efficient use of industrial/commercial land is to enable large development pads to be created and to focus vegetation retention in areas adjacent to property boundaries, or in front setbacks.

The uncertainty regarding the potential impacts of Aboriginal Cultural Heritage raises concerns about the accuracy of the proposed land uses across the entire PSP. The omission of the 12 identified Aboriginal cultural heritage areas creates doubt about the feasibility of the proposed land uses. It is submitted that the PSP must provide guidance around Cultural Heritage Management Plan (CHMP) management expectations, specifically because the Aboriginal Cultural Heritage Impact Assessment recommends the protection of Aboriginal Cultural Heritage though the provision of heritage parks, conservation areas and passive open spaces. The PSP must specify the ownership and management actions to be applied if heritage parks, conservation areas, and open space reserves are mandated within future CHMPs.

The PSP proposes to introduce a staging plan to ensure that critical drainage infrastructure is delivered prior to any development occurring across both the Casey Fields South and the Devon Meadows PSP. The delivery of this infrastructure is burdensome and will cause unnecessary delay to the development of 1490 Ballarto Road. Specifically, 1490 Ballarto Road does not form part of the CFS&DM drainage scheme area and therefore the staging requirements outlined in R27 should not apply. It is therefore submitted that Plan 9 – Infrastructure and Development Staging designate property ID #CF09 as S1a.

Native Vegetation

The PSP identifies trees to be retained on site and the retention of these trees is proposed to be enforced through an updated Casey Planning Scheme Clause 52.17 Schedule.

PSP Plan 13 identifies a number of trees to be retained on site, however most of these trees have been removed from the land, in accordance with the exemption requirements detailed under the current Clause 52.17-7 ordinance.

Five trees remain on site the site at 1490 Ballarto Road. These trees have been assessed by Evergreen Tree Consulting to determine the impact of the development masterplan that was prepared for the property to inform the now established service station.

The Arboriculture Assessment makes the following conclusions:

- All five trees have been planted and are Australian native species.
- T1 and T2 presented with poor structure, trunk wounds, fungal brackets, decayed cavity, wood boring insect damage was also present on T1.
- T3 is self sown from T2 and has not developed correctly. It has significant canopy bias to the west from severe suppression from the overhead canopy of T2.
- T4 and T5 both have poor multi-stemmed structure with codominant stems, including bark and compression fork with swelling. T5 has a sparse canopy cover with broken branches and die back.
- T1, T2, T3, T4 and T5 are not appropriate trees to retail within a development proposal due to the defects observed and short Useful Life Expectancy.
- The tree protection zones for all 5 trees is 100% based on the proposed masterplan. Accordingly, all five trees are considered unretainable as the development design and the trees are unable to coexist.

It is submitted that the 5 trees located on site will need to be removed to facilitate a functional road movement and logical subdivision layout, as well as appropriate connections to adjoining properties and the arterial road network. The trees are not highly regarded, have clear deficiencies in their health and structure and do not support longevity.

It is requested that Plan 13 of the PSP be updated to remove all trees from the site to reflect its current status, and to eliminate the unnecessary need for a planning permit to remove the remaining native vegetation as part of a future planning permit application post PSP gazettal.

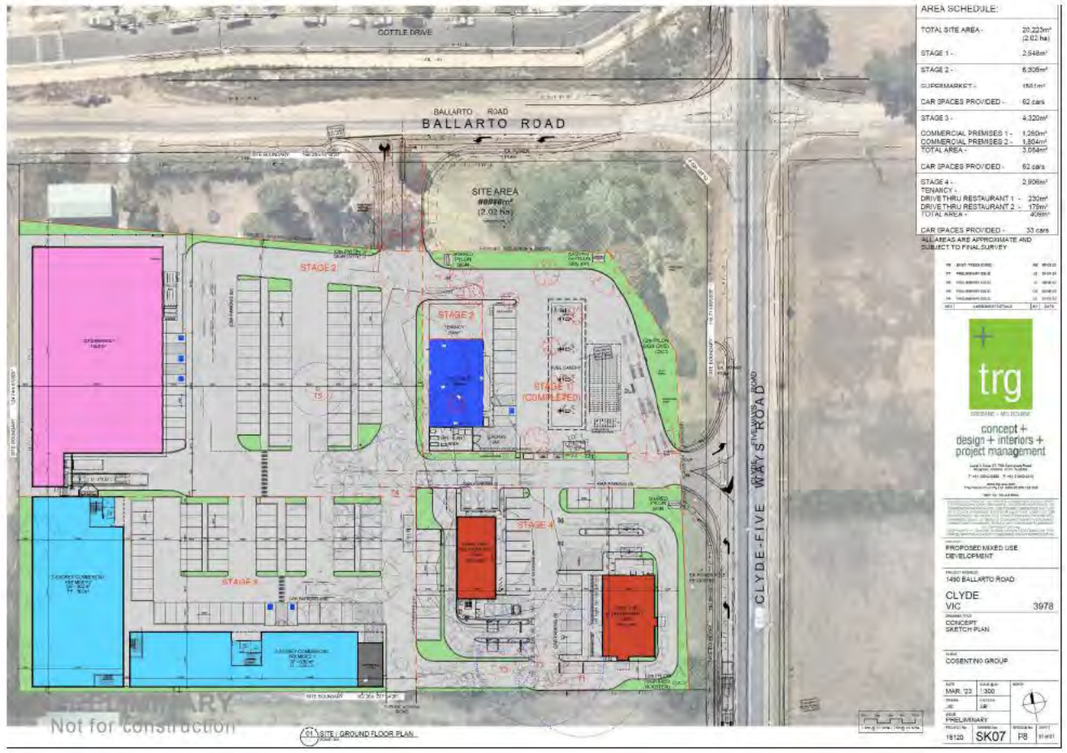


Figure 5: 1490 Ballarto Road Masterplan

Figure 6: 1490 Ballarto Road Masterplan

Aboriginal Cultural Heritage

PSP Guidelines 2.0

The VPAs website states that The 2.0 process aims to:

- *Co-design of a Place-Based Plan*
- *Achieve up-front, early resolution of issues*
- *Gain better and earlier information on infrastructure demands to inform agency planning and budget bids*
- *Update guidance on PSP content reflecting new government policy and promoting innovation*
- *Provide stronger guidance in PSPs for staging of development*

The unknown location and the extent of land required to protect the 12 identified places of Aboriginal Cultural Heritage creates uncertainty regarding whether the land uses proposed across the PSP can be realistically achieved.

The PSP guidelines articulately detail their aim provide Achieve up-front, early resolution of issues. In its closing summary the Aboriginal Cultural Heritage Impact Assessment (ACHIA) that has been prepared to support the PSP states:

'In recent years, archaeological salvage was considered to be an acceptable management condition. However, salvage itself is harm and for this reason is now considered a last resort management condition applied only where a development absolutely cannot avoid impact. Instead, the preferred management condition in place of salvage is the establishment of heritage parks, conservation zones or minimally landscaped passive open spaces'.

Further, Recommendation 3 notes:

'Map 12 should be used as a starting point for designating open spaces. However, Map 12 provides indicative and likely locations for Aboriginal cultural heritage and should be ground-truthed with a formal archaeological survey prior to incorporation in PSP development planning'.

An ideological shift towards broadscale arfefact retention is inconsistent with the purpose of growth area land, which is to provide large scale development sites free from encumbrances to enable new communities to be built at scale in an efficient manner.

It is understood that the *likely locations for Aboriginal cultural heritage have yet to be ground-truthed with a formal archaeological survey. Accordingly, if it is* the VPAs intention to protect areas of cultural heritage within heritage and conservation parks and open space reserve, how will changes to the PSP and potentially the DSS be fairly and transparently communicated with the landowners right to respond to potentially significant changes to the designated land uses and NDA on their site.

It is submitted that the current location of the 12 identified places of Aboriginal Cultural Heritage should be identified to provide a full analysis of the precinct features that will consequently inform the land use outcomes and areas of constraint within this PSP.

It is submitted that the PSP must specify the ownership and management actions to be applied if heritage parks, conservation areas, and open space reserves are mandated within a future CHMP to safeguard Aboriginal cultural heritage.

We request the right to make a further submission in relation to Aboriginal cultural heritage should additional information be provided throughout the PSP planning scheme amendment process.

Staging

PSP Requirement R27

The PSP proposes to introduce a staging plan to ensure that critical drainage infrastructure is delivered prior to any development occurring across both the Casey Fields South and the Devon Meadows PSP. Specifically, Requirements R27 mandates the following:

'Prior to the issue of a statement of compliance for any stage of the subdivision of a PSP parcel or the commencement of development of a PSP parcel, DSS assets WD1, WD2, WD3, SGC, WD4, O1, O2, O3 identified within the respective stage shown on Plan 9Infrastructure and Development Staging and Table 8 Water infrastructure must be delivered unless otherwise agreed to in writing by Melbourne Water and the responsible authority'.

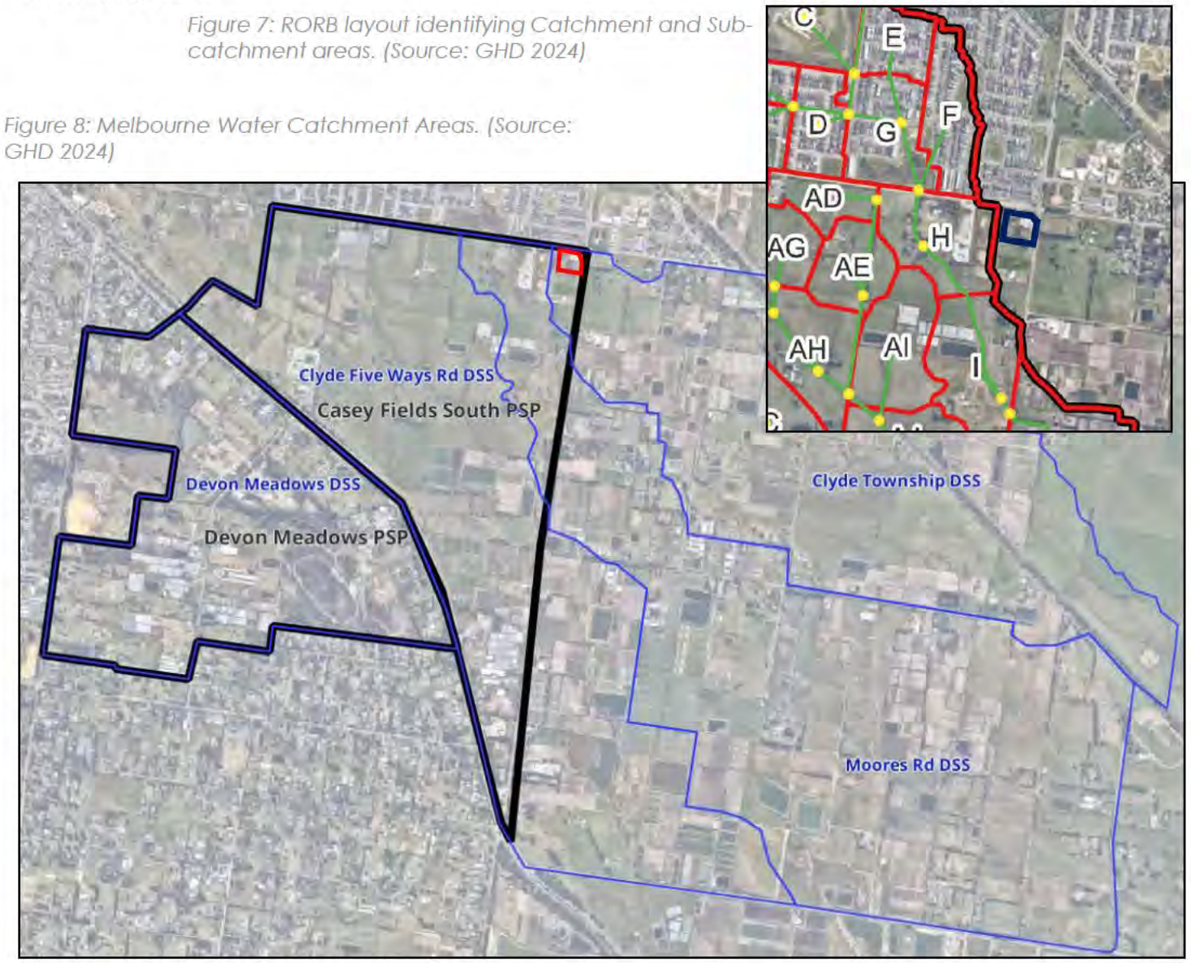
The delivery of this infrastructure is burdensome, particularly since no lots will have been sold at the time of construction and delivery of these assets. As a result, the development across the PSP and at 1490 Ballarto Road is likely to face unnecessary delays until this infrastructure is developed in its ultimate configuration.

The property at 1490 Ballarto Road is not within the CFS&DM drainage scheme area but instead falls under the Clyde Township drainage scheme. Therefore, the staging requirements outlined in R27 should not apply to the subject land. The property is also adjacent to the Clyde township and an established residential precinct, with services already extended to support the existing service station. Given these factors, there is no logical reason to delay the development of this site.

It is submitted that Plan 9 – Infrastructure and Development Staging be updated to remove property ID #CF09 from the staging plan.

Figure 7: RORB layout identifying Catchment and Sub-catchment areas. (Source: GHD 2024)

Figure 8: Melbourne Water Catchment Areas. (Source: GHD 2024)



Conclusion

Cosentino Group is supportive of the proposed applied Industrial 3 Zone across the entirety of their land at 1490 Ballarto Road.

The PSP identifies trees to be retained on site and the retention of these trees is proposed to be enforced through an updated Casey Planning Scheme Clause 52.17 Schedule. A number of these trees proposed for retention in PSP Plan 13 have been removed from the site in accordance with current exemptions under clause 52.17-7. It is therefore appropriate that Plan 13 be updated to reflect these changes.

An independent Arboriculture Assessment has confirmed that the 5 remaining trees identified for retention have poor structure, trunk wounds, fungal brackets, decayed cavity, wood boring insect damage. It is the consultant's professional opinion that these trees are not appropriate to retain within a development proposal due to the defects observed and short Useful Life Expectancy. It is therefore submitted that the removal of the 5 trees remaining trees from Plan 13 is appropriate and will eliminate the unnecessary need for a planning permit to remove this native vegetation as part of a future planning permit application post PSP gazettal.

The omission of the 12 identified Aboriginal cultural heritage areas creates significant uncertainty regarding the development potential of each site within the PSP. This concern is amplified by the management actions recommended in the Aboriginal Cultural Heritage Impact Assessment, which include the protection of cultural heritage artifacts and values within heritage parks, conservation areas and open space reserves. Given the current uncertainty around Aboriginal cultural heritage and the potential impact that future CHMP management actions could have on the PSP performance targets, it is submitted that the PSP must specify the ownership and management actions to be applied if heritage parks, conservation areas, and open space reserves are required within a CHMP to safeguard Aboriginal cultural heritage. A default 'artefact retention' approach would substantially compromise the development capability of this PSP area.

The property at 1490 Ballarto Road is located with the Clyde Township drainage scheme. Therefore, the staging requirements outlined in R27 should not apply to the subject land. The property is also adjacent to the Clyde township and an established residential precinct, with services already extended to support the existing service station. Given these factors, there is no logical reason to delay the development of this site and 1490 Ballarto Road should be removed from all staging requirements.

Appendix A: Evergreen Tree Consulting – Arboricultural Impact Assessment

Arboricultural Impact Assessment

Prepared for: Cosentino Property Group

Site Address: 1490 Ballarto Rd, Clyde

Trees Inspected: 19/03/2025

Version 1: 25/03/2025

Prepared by: [redacted]

Diploma of Arboriculture – Melbourne Polytechnic

Certificate III of Horticulture – Melbourne Polytechnic

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Introduction

Evergreen Tree Consulting has been engaged by Cosentino Property Group to prepare an Arboricultural Impact Assessment on proposed works within the site at 1490 Ballarto Rd, Clyde, in line with modern arboricultural practices and AS4970-2009 “Protection of Trees on Development Sites”.

This report identifies the trees recommended to be removed, retained trees, any encroachment into a TPZ by the proposed works, an assessment of any impacts to the trees and recommendations to reduce impacts where necessary.

Methodology

On the 19th of March 2025, Scott Tappenden attended 1490 Ballarto Rd, Clyde to assess 5 trees for the purpose of preparing an Arboricultural Impact Assessment.

- Tree height was estimated, and canopy spread was estimated using an average measurement from North – South and East – West.
- Diameter was measured at root buttress and 1.4 metres above ground level.
- Inspections were carried out from ground level only.
- Photographs taken with Samsung S22.

The following tree data was collected:

- Tree number, Genus, Species.
- Age class
- Diameter at 1.4m(DBH) and Diameter Above Root Buttressing (DARB)
- Tree height and average canopy spread
- Tree health, form and structure
- Retention Value
- Useful Life Expectancy
- Comments

- The supplied proposed 'Concept Sketch Plan' has been referenced during this report.
  - **Prepared By:** The Retail Group Pty Ltd
  - **Plan Date:** March 2023
  - **Site Address:** 1490 Ballarto Rd, Clyde
  - **Sheet:** 1 of 1

Planning Controls

1490 Ballarto Rd, Clyde, is located in the **Casey Council** and is subject to the following zones and overlays.

Planning Zone:

URBAN GROWTH ZONE (UGZ)

Planning Overlays:

N/A

Site Description

The site is located within an urban growth zone and has been noted as light industrial for future development. The site is situated on a high-profile intersection and will not only act as the gateway into the Casey Fields South Employment Precinct Structure Plan but also provide significant value to the residents which adjoin the residential zones to the North, North-East and East. A well thought out design will allow both residents and workers to walk from nearby housing to utilise the goods and services of the development and also allow integration between adjoining properties to promote vehicle flow between the developments.

Figure 1: Satellite image of 1490 Ballarto Rd, Clyde. Boundaries shown in white. Approx subject tree locations in yellow.

Development Proposal

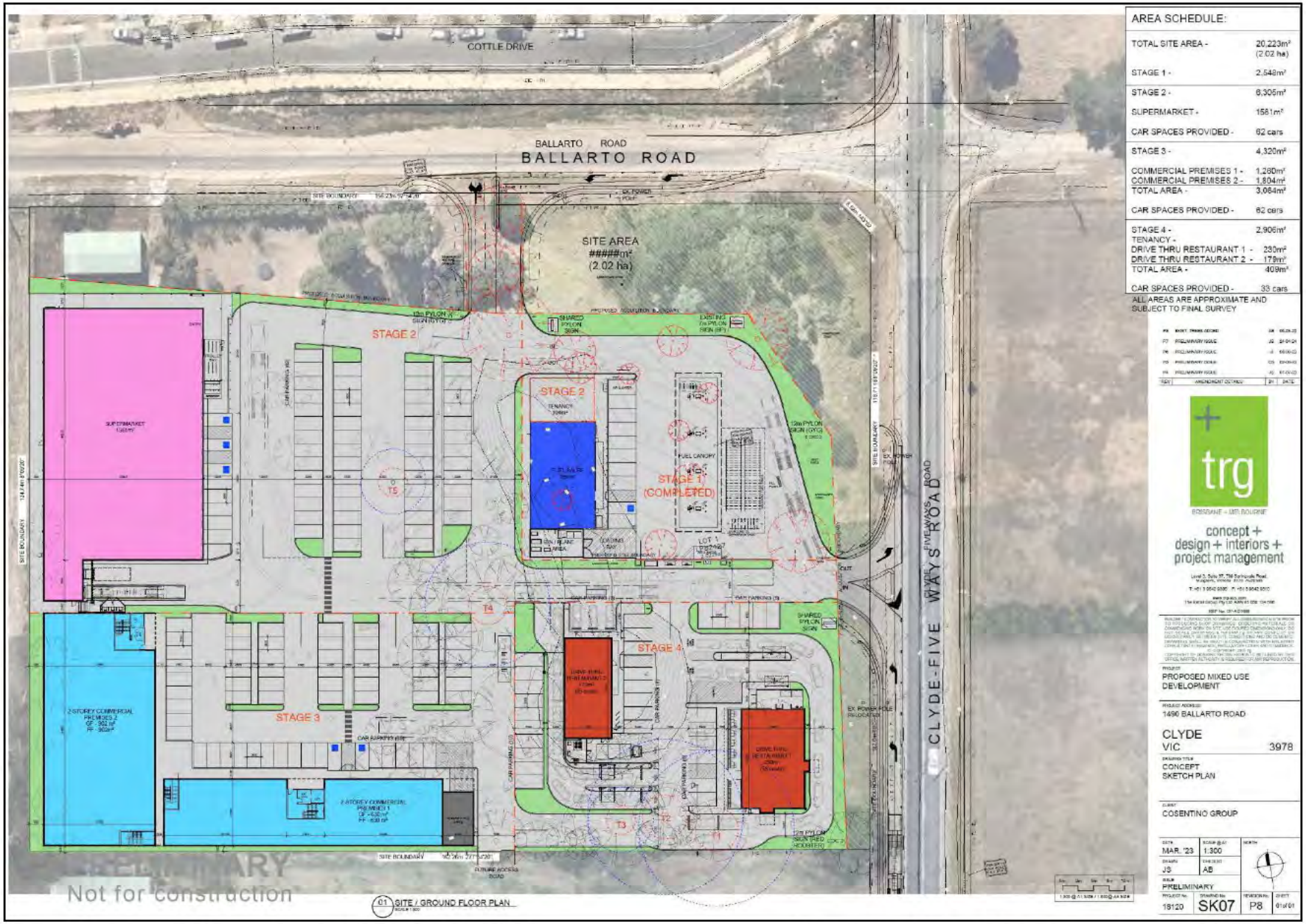


Figure 2: Development Design Proposal 1490 Ballarto Rd, Clyde

Proposed Works

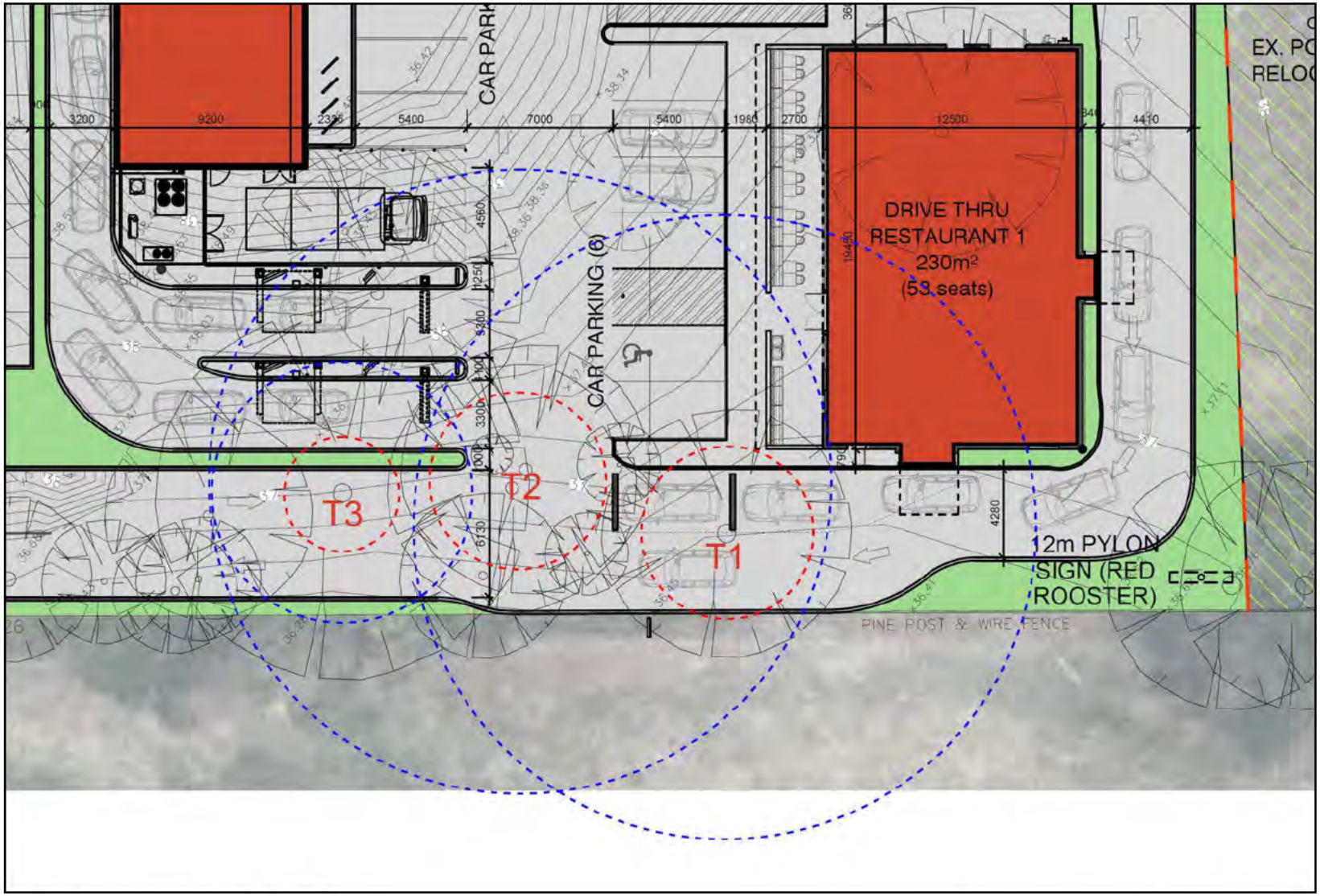


Figure 3: Proposed works – T1 T2 T3

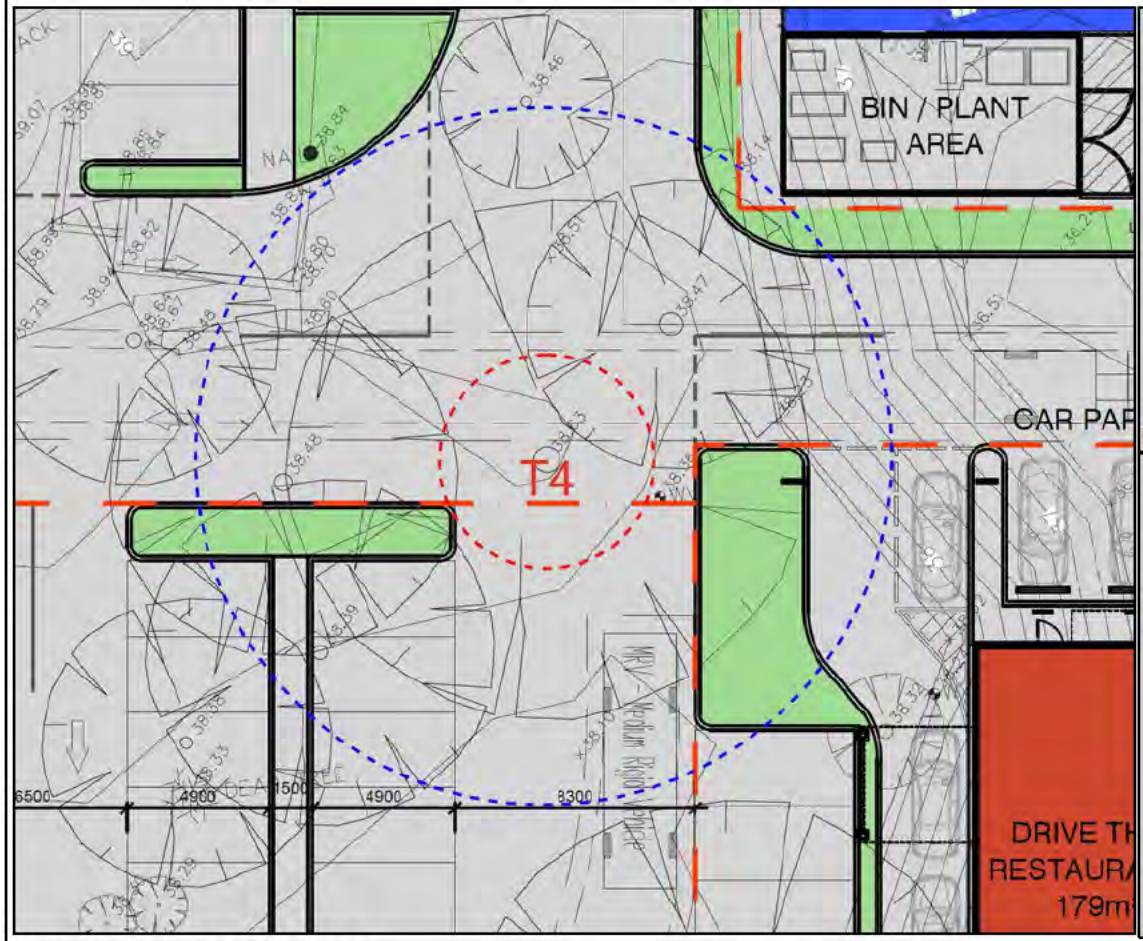


Figure 4: Proposed works – T4

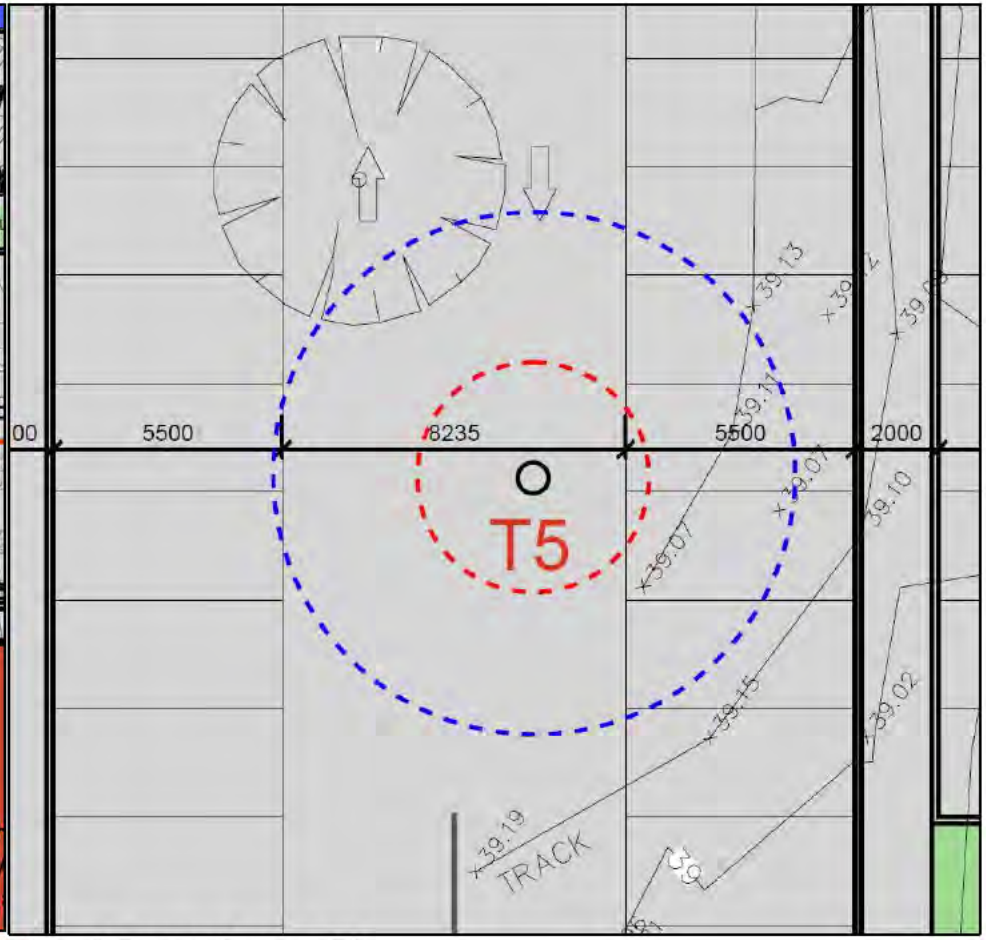


Figure 5: Proposed works – T5

Proposed Encroachments & Impact

The following table shows which trees are being encroached by the development design proposal.

Tree #	I.D	Proposed Encroachment	% of TPZ Area Encroached	Likelihood of Impact to Tree Health & Stability	To be Removed	Comments & Recommendations
1	*Eucalyptus botryoides*	Internal road, drive through restaurant vehicle exit	100% Works proposed over location of tree.	Unretainable	Yes	**Onsite** The development proposal includes an internal road which is an exit from a restaurant drive through lane. The works are proposed over the location of T1. T1 presented with poor structure, included bark compression forks and multiple trunk wounds each with fungal brackets. Another wound was observed with wood boring insect damage entering the heartwood. T1 is not viable in the long term and is not an appropriate tree to retain within this development proposal due to the defects observed. The retention value of this tree is Low and it is not worthy of constraining the proposed design. The ULE of T1 is short. T1 should be removed.
2	*Eucalyptus botryoides*	Internal road, drive through restaurant vehicle exit	100% Works proposed over location of tree.	Unretainable	Yes	**Onsite** The development proposal includes an internal road which is an exit from a restaurant drive through lane and entry to a carpark. The works are proposed over the location of T2.

Tree #	I.D	Proposed Encroachment	% of TPZ Area Encroached	Likelihood of Impact to Tree Health & Stability	To be Removed	Comments & Recommendations
						T2 presented with poor structure, included bark compression forks and several trunk wounds with fungal brackets. Swelling around internal decay pockets was observed. A decayed cavity was observed that contained an active beehive. T2 is not viable in the long term and is not an appropriate tree to retain within this development proposal due to the defects observed. The retention value of this tree is Low and it is not worthy of constraining the proposed design. The ULE of T2 is short. T2 should be removed.
3	*Eucalyptus botryoides*	Internal road	100% Works proposed over location of tree.	Unretainable	Yes	**Onsite** The development proposal includes an internal road which is an entry/exit for a carpark. The works are proposed over the location of T3. T3 is likely to have self-sown from T2 and is growing directly under the canopy of T2. This has caused a severe canopy bias and failed codominant stem as the tree has grown. The failed head has split the stem. The canopy is leaning heavily to the West from the major suppression. T3 is not viable in the long term and is not an appropriate tree to retain within this development proposal due to the defects observed. The retention value of this tree is Low and it is not worthy of constraining the proposed design. The ULE of T3 is short.

Tree #	I.D	Proposed Encroachment	% of TPZ Area Encroached	Likelihood of Impact to Tree Health & Stability	To be Removed	Comments & Recommendations
						T3 should be removed.
4	*Corymbia maculata*	Internal road, semi-trailer access to supermarket	100% Works proposed over location of tree.	Unretainable	Yes	**Onsite** The development proposal includes an internal road which is a main entrance/exit for vehicles and semi-trailer access for the supermarket. The works are proposed over the location of T4. T4 is multistemmed from ground level. It presented with compression forks and included bark with swelling. The structure is codominant. A large suspended broken branch is located to the North. T4 is not viable in the long term and is not an appropriate tree to retain within this development proposal due to the defects observed. The retention value of T4 is Low due to the poor structure and the ULE is short. T4 should be removed.
5	*Corymbia maculata*	Internal road, Carparking	100% Works proposed over location of tree.	Unretainable	Yes	**Onsite** The development proposal includes a car park for the supermarket. The works are proposed over the location of T5. T5 presented with poor structure, included bark and compression forks. Swelling was observed around the included bark union. The canopy was sparse and canopy dieback and broken branches were observed. T5 is not viable in the long term and is not an appropriate tree to retain within this

Tree #	I.D	Proposed Encroachment	% of TPZ Area Encroached	Likelihood of Impact to Tree Health & Stability	To be Removed	Comments & Recommendations
						development proposal due to the defects observed. The retention value of T5 is Low due to the poor structure and the ULE is short. T5 should be removed.

Table 1: Proposed Encroachments

Conclusions & Recommendations

1. Five (5) trees have been assessed within the site at 1490 Ballarto Road, Clyde.
2. All 5 trees have been planted and are Australian native species.
3. T1 and T2 presented with poor structure, trunk wounds, fungal brackets (see tree photos), decayed cavity, wood boring insect damage was present in heartwood on T1.
4. T3 is self-sown from T2 and has not developed correctly. It has a significant canopy bias to the West from the severe suppression from the overhead canopy from T2. (see tree photos)
5. T4 and T5 both have poor multistemmed structure with codominant stems, included bark and compression forks with swelling. T5 has a sparse canopy with broken branches and dieback. (see tree photos)
6. T1, T2, T3, T4 and T5 are not appropriate trees to retain within a development proposal due to the defects observed and short ULE.
7. A development design has been proposed and the following trees will require removal to accommodate the works.
    a. T1, T2, T3, T4, T5
8. The Tree Protection Zone of all 5 trees are being encroached by the development proposal.
    a. The encroachment for all 5 trees is 100% as the works are proposed over the location of all 5 trees.
    b. T1, T2, T3, T4, T5 were assessed with Low retention value and none of these trees are worthy of constraining a proposed development design.
    c. All 5 trees have a short Useful Life Expectancy.
    d. T1, T2, T3, T4, T5 are considered unretainable as the design and the trees are unable to co-exist.

Appendix 1: Tree Data

The following table shows all tree data collected during the assessment.

- * = Multi stemmed tree
- Calculated D.B.H is for multi-stemmed trees only. $DBH = \sqrt{s1^2 + s2^2 + s3^2 + s4^2 + s5^2}$

Tree #	Botanical Name	Common Name	Age	Origin	D.B.H (cm)	Calculated D.B.H (cm)	D.A.R.B (cm)	Height (m)	Width (m)	Health	Form	Structure	Retention Value	U.L.E (years)	TPZ radius (m)	SRZ radius (m)	TPZ Area (m^2)	Comments
1	*Eucalyptus botryoides*	Southern Mahogany	Mature	Native	69*47* 80*75	138	174	22	20	Good	Fair	Poor	Low	5 > 10 years	15.00	4.18	706.86	4 main stems from ground level with acute unions, double bifurcation with Included bark in each bifurcation, compression forks, girdled roots on north side, 3 southern stems all have wounds with fungal brackets, failed branch wounds, large deadwood, wood boring insect damage on wound on east side rear, west stem has 2 large wounds, brackets on west stem upper wound, south stem wound has fungal bracket,
2	*Eucalyptus botryoides*	Southern Mahogany	Mature	Native	83*123	148	186	23	24	Good	Fair	Poor	Low	5 > 10 years	15.00	4.29	706.86	Multistemmed from base, acute compression fork on rear 2 stems to the south, trunk wound has bracket fungi on southern stem, , girdled root, included bark in main union, large deadwood, each south stem approx. 60 and 80 dbh, large swelling around included bark, broken branches, suspended deadwood, north stem at 9m has decayed cavity with active bee hive, over extended laterals lower canopy, large broken internal branch, epicormic regrowth has matured and is adding weight to branches, center stem has wound

Tree #	Botanical Name	Common Name	Age	Origin	D.B.H (cm)	Calculated D.B.H (cm)	D.A.R.B (cm)	Height (m)	Width (m)	Health	Form	Structure	Retention Value	U.L.E (years)	TPZ radius (m)	SRZ radius (m)	TPZ Area (m^2)	Comments
																		at 4m with 2 large fungal brackets, swelling of stems visible around decay pockets,
3	*Eucalyptus botryoides*	Southern Mahogany	Semi-Mature	Native	50*25	56	66	15	10	Good	Poor	Poor	Low	>5 years	6.72	2.78	141.87	Self sown under canopy of larger t2, leaning heavily west, canopy bias west, impacted form from major suppression, codominant stem east side, failed head on codominant stem has split down stem,
4	*Corymbia maculata*	Spotted Gum	Mature	Native	34*55* 60*48	100	132	20	20	Good	Good	Poor	Low	5 > 15 years	12.00	3.72	452.39	Multistemmed from ground level with compression forks and Included bark, very large suspended deadwood on north side, deadwood, large bird nest in upper crown, appears to have two tightly attached main stems which have both bifurcated, 1 broken branch north side,
5	*Corymbia maculata*	Spotted Gum	Mature	Native	23*35 *35	55	66	16	10	Fair	Fair	Poor	Low	5 > 10 years	6.72	2.78	141.87	Acute compression forks, codominant, 3 stems, included bark, sparse canopy, broken branches, deadwood, canopy die back,

Table 2: Tree Data

Appendix 2: Tree Photos

Tree #1

Tree #1 (Fungal brackets 1of4)

Tree #1 (Fungal brackets 2 of 4)

Tree #1 (Fungal brackets 3&4 of 4)

Tree #2

Tree #2 (Fungal brackets 1&2 of 4)

Tree #2 (Fungal brackets 3&4 of 4)

Tree #2 (decayed cavity with beehive inside)

Tree #3 (under canopy of T2)

Tree #3 (Impacted form from suppression)

Tree #3

Tree #3

Tree #4

Tree #4 (poor structure)

Tree #4 (poor structure)

Tree #4 (dead branch suspended in canopy)

Tree #5 (sparse, dieback, broken branches)

Tree #5 (poor structure)

Tree #5 (poor structure)

References

AS4970-2009 “The Protection of Trees on Development Sites”

Glossary of Terms

Age Class

Juvenile	A Seedling or Sapling
Young	A tree that is actively growing and shows significant increases in annual growth. The duration and extent of the growth is dependent on the species and cultural conditions in which the tree is growing.
Semi-Mature	A tree that shows active annual growth and has not yet reached its genetic potential with regard to canopy height and width. The onset and duration of semi-maturity is dependent on the species and cultural conditions in which the tree is growing.
Mature	A tree that shows minor annual growth and has reached close to its maximum genetic potential. The onset and duration of maturity is dependent on the species and cultural conditions in which the tree is growing.
Senescent	A mature tree that is in physiological decline showing little or no annual growth. The onset of senescence is dependent on the species and cultural conditions in which the tree is growing.
Decline	A tree with reduced vigour or showing no signs of annual growth due to environmental stress, pathogenic or natural causes.

Calculated DBH
Used to calculate the total DBH for multi-stemmed trees only.
Formula used: $DBH = \sqrt{s1^2 + s2^2 + s3^2 + s4^2 + s5^2}$

Decurrent
Tree form which develops when the lateral branches grow as fast or faster than the terminal shoot. This results in a tree with a broad spreading form and multiple trunks.

Defect
An injury, growth pattern/habit, decay or other conditions that may reduce the tree’s structural integrity or affect its health.

Diameter at Breast Height (DBH)
The trunk diameter measured at 1.4m above ground level determined from the circumference of the trunk divided by *pi* (π).

Diameter at Root Buttress (DARB)
The trunk diameter measured from the point at which the tree’s root buttressing/flare initiates.

Dieback
The progressive death of shoots or roots starting at the extremities.

Dynamic Load
A force created by a moving load or a load that changes with time and/or motion.

Encroachment
An incursion into a tree's TPZ from a proposed development or existing structure or buildings.

Energy Production
The production of energy resulting from photosynthetic material that converts sunlight into carbohydrates and oxygen which is then used for tree growth, root development, root exudates for soil associates, reproduction, storage and defence.

Excurrent
Tree form which develops when a dominant leading shoot outgrows the lateral branches. This results in a narrow, cone-shaped crown with a clearly defined central trunk.

Form

Good	A tree with a typical canopy shape for its species.
Fair	A tree with a canopy presenting with signs of an altered shape such as a minor canopy bias, previous pruning or phototropic growth habit.
Poor	A tree with a significantly atypical or altered shape.

Health

Good	A tree that presents with a full, dense canopy, with no signs of pest or disease and strong vigour.
Fair	A tree which may show signs of reduced vigour with some small diameter deadwood. It may have some pest or disease damage that is not causing a significant impact to the tree.
Poor	A tree which may be in decline with little to no annual growth. Pests and disease may be widespread throughout the tree and/or die-back present, sparse canopy.
Very Poor	A tree in significant decline showing no annual growth. Large sections of die-back are present and is very unlikely to recover.
Dead	A tree with no signs of life and a completely dead canopy.

Load
A term used to indicate the magnitude of a force.

Lopping
The indiscriminate cutting of a tree to reduce its size. (Not regarded as an acceptable practice and does not comply with AS4373-2007 '*Pruning of Amenity Trees').*

Nutrient Uptake
The process in which a tree captures elements that are essential for growth.

Nutrients
Molecules that all organisms need to make energy, grow, develop and reproduce.

Origin

Indigenous	A species found in a specific region as a result of only natural process with no human intervention.

Native	A species found in a broader region or country.
Exotic	A species that is native to a country other than Australia.

Pathogen
A bacterium, virus or other microorganism that can cause disease or infection.

Percentage (%) Encroachment
The calculated level of encroachment into a tree's TPZ.

Primary Disorder
An initial, inhibiting or abnormal condition that impairs the performance of one or more vital functions of a tree.

Pruning
The process of removing branches or occasionally roots from a tree using approved arboricultural practices, to achieve a specified objective.

Secondary Disorder
A disorder that develops after a tree is stressed by a primary disorder.

Significance/Retention Value

High	A mature tree that contributes positively to a site due to its botanical, historical or local significance in combination with good physiological characteristics such as health, form, structure and future development. Significant efforts should be made to retain this tree and it should be considered for retention within a proposed development.
Medium	A semi-mature to mature tree which exhibits fair or good characteristics of health, structure or form and/or may provide some amenity value to the surrounding area or habitat value. Should be considered for retention if possible within a development design proposal and may be modified to allow for construction (eg: canopy pruning, root pruning etc).
Low	A tree that provides minimal contribution to the surrounding landscape and/or may be in poor or declining health. This tree may have a poor structure, poor form, be a noxious/poisonous or listed weed species or a combination of these characteristics. It may be in an inappropriate location. This tree is not worthy of being a constraint to a development design proposal.
Nil	A tree with no landscape significance and its retention is inappropriate. The removal of this tree would be of benefit to the landscape.

Signs
Objective physical evidence of a causal agent (eg: insect eggs, borer holes, frass).

Soil Compaction
The compression of soil resulting in reduced macropore space and soil volume. This restricts the infiltration of water through the soil profile, impedes the efficiency of nutrient and water uptake, restricts new root development and root exploration and impedes gaseous exchange between root cells and the atmosphere.

Static Load
A constant load exerted by a mass due to its weight.

Strain
The extent to which a material deforms under an applied force or stress.

Stress
A factor that negatively affects the health of a tree and stimulates a physiological response.

Structural Root Zone (SRZ)
The area around the base of a tree required for stability in the ground. Woody root growth and soil cohesion in this area are necessary to hold the tree upright. The SRZ is normally circular with the trunk at its centre and is expressed by its radius in metres.
This zone considers a tree's structural stability only and not the root zone required to maintain vigour and long-term viability. (*AS4970-2009 Protection of Trees on Development Sites*).

Formula Used: SRZ radius = $(D \times 50)^{0.42} \times 0.64$

D = Trunk Diameter, in meters, measured above the root buttress.

Structure

Good	A tree with structure that is typical of its species with no defects such as decay, included bark, cracks, splits, tears outs. Generally, with a single defined trunk with secondary limbs presenting with good attachments.
Fair	A tree with minor defects in its canopy but is generally free of any significant structural issues. Pruning may be required to fix minor defects. Its canopy will mostly be symmetrical and typical of its species.
Poor	A tree presenting with 1 or more defects such as included bark, co-dominant stems, poor attachments and may also have an atypical or asymmetrical canopy. The defects may be able to be rectified with pruning.
Very Poor	A tree with significant defects related to its primary stem or secondary scaffold limbs that cannot be rectified with pruning or other measures. This removal of this tree may be required in the short term.
Hazardous	A tree with major defects that is likely to fail and should be removed as soon as possible.

Symptoms
Subjective reactions to a disease or disorder (eg: wilting, dieback, defoliation).

Tree Protection Zone (TPZ)
A specified area above and below ground and at a given distance from the centre of the trunk set aside for the protection of a trees roots and crown to provide for the

viability and stability of a tree to be retained where it is potentially subject to damage by development. (*AS4970-2009 Protection of Trees on Development Sites*).

Formula Used: TPZ radius = DBH x 12

Useful Life Expectancy (ULE)

0 years	A dead, dying or dangerous tree with significant defects, poor health or requires removal in the short term.
<5 years	A poor example of the species that is in decline or will likely die or requires removal within 5 years.
5-10 years	A tree in fair condition that contributes to the amenity of the landscape in which it is growing, can be retained with a tolerable level of management.
10-20 years	A tree in fair-good condition that contributes to the amenity of the landscape in which it is growing and can be retained with an appropriate level of management.
>20 years	A healthy tree in good condition that will contribute to the amenity of the landscape in which it is growing for at least another 20 years with an appropriate level of management.

Vigour
The overall health, condition and resilience of a tree, reflected in the ability of the whole tree to grow.

Work(s)
Any physical activity in relation to land that is specified by the determining authority.

Wound Response
New wood developing in response to a wound.

Woundwood
Strong woody tissue that grows behind a callus which replaces it in that location. Woundwood closes wounds, then normal wood continues to form. After wounding, a callus forms around the margins of the wound. Woundwood forms later as the cells become lignified. It is not meristematic but is high in lignin.

END OF REPORT

Appendix B: 1490 Ballarto Road Masterplan

Development Proposal

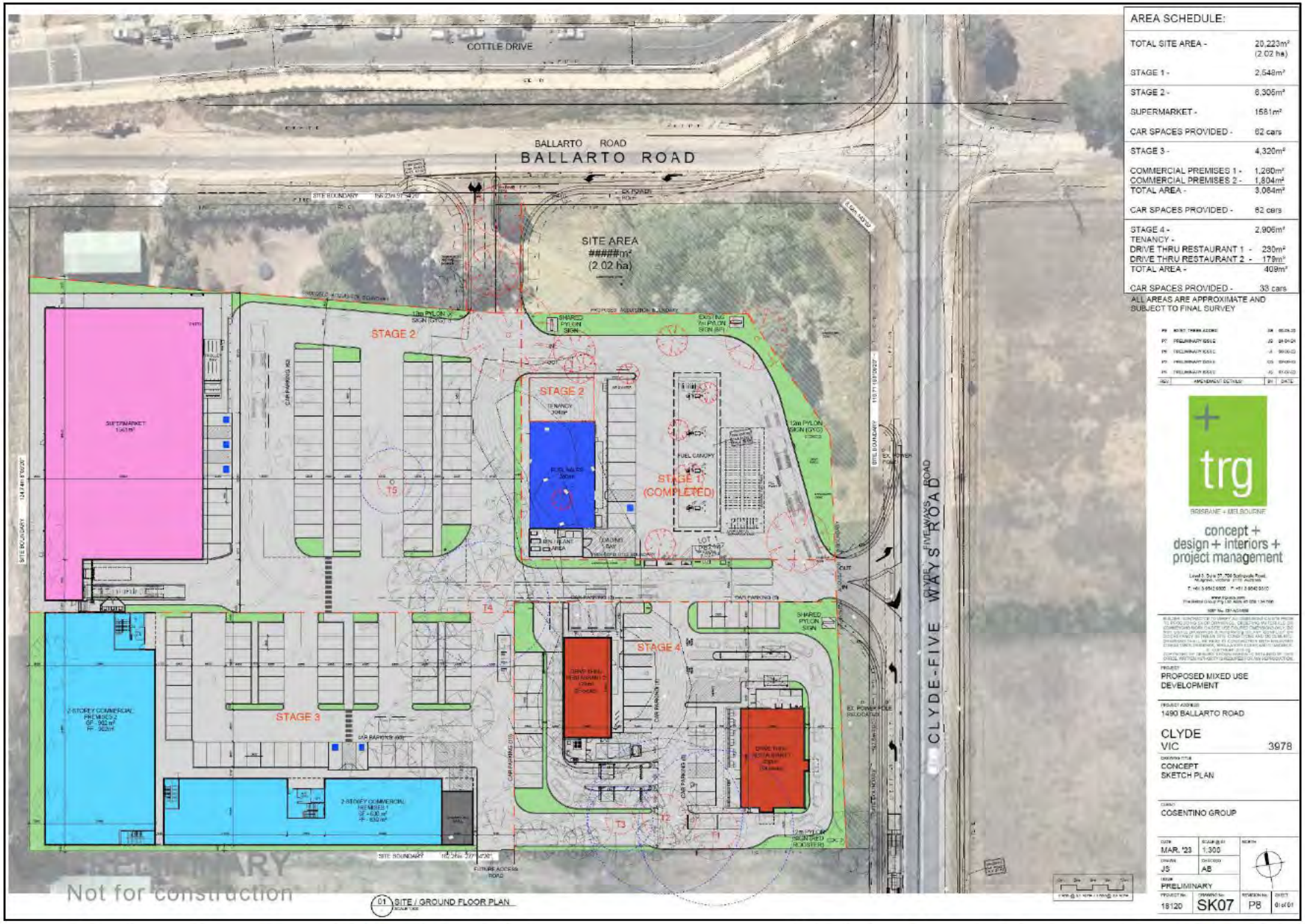
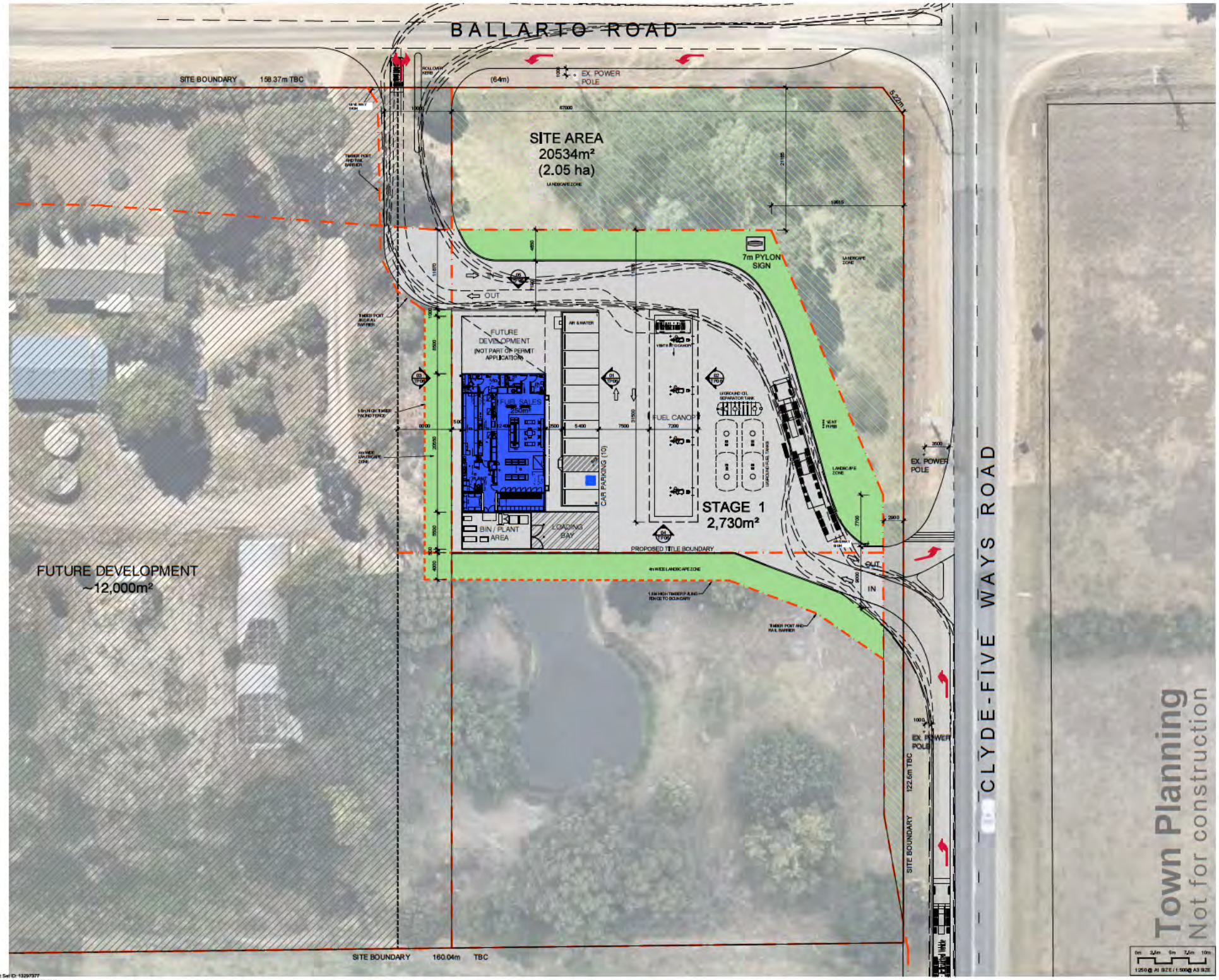


Figure 2: Development Design Proposal 1490 Ballarto Rd, Clyde

Appendix C: 1490 Ballarto Road – Endorsed Service Station Site Plan



Town Planning
Not for construction

REV	AMENDMENT DETAILS	BY
D	DIMENSIONS ADDED TO BOUNDARY	TC
C	SITE PLAN REVISED	TC
B	SITE PLAN REVISED	JS
A	PLANNING ISSUE	AB
P3	PRELIM ISSUE - CROSSOVERS AMENDED	AB
P2	PRELIMINARY ISSUE	KM
P1	PRELIMINARY ISSUE	AB

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PROJECT
PROPOSED SERVICE STATION DEVELOPMENT

PROJECT ADDRESS
1490 BALLARTO ROAD

CLYDE
VIC 39

DRAWING TITLE
PROPOSED SITE PLAN

CLIENT
COSENTINO GROUP

DATE	SCALE @ A1	NORTH
JUN '18	1:250	
DRAWN	CHECKED	
JI	AB	
ISSUE		
PLANNING		

PROJECT No.	DRAWING No.	REVISION No.	SHEET
18120	TP03	D	03 of 08

0m 3.75m 5m 7.5m 10m
1:250 @ A1 SIZE / 1:500 @ A3 SIZE