# 5.2 T200589 - Development of the land for six (6) dwellings at 48 James Street, Lang Lang VIC 3984 

Responsible GM: Peter Benazic<br>Author:<br>Heather Chamberlain

## Recommendation(s)

That a Refusal to Grant Planning Permit T200589 be issued for the Development of the land for six (6) dwellings at 48 James Street, Lang Lang VIC 3984 on the following grounds:

- Inconsistent with the existing and preferred character of the area
- Inconsistent with the Neighbourhood Residential Zone
- Unreasonable amenity impacts to existing and future residents
- Inconsistency with State and Local Planning Policy, including Clause 55 (ResCode) and the Lang Lang Township Strategy


## Attachments

1. Locality Map [5.2.1-1 page]
2. Development Plans \& Reports [5.2.2-60 pages]
3. CONFIDENTIAL - T 200589 PA - Objection 1 [5.2.3-1 page]
4. CONFIDENTIAL - T 200589 PA - Objection 2 [5.2.4-2 pages]
5. CONFIDENTIAL - T 200589 PA - Objection 3 [5.2.5-1 page]
6. CONFIDENTIAL - T 200589 PA - Objection 4 [5.2.6-4 pages]

## Executive Summary

| APPLICATION NO.: | T200589 |
| :--- | :--- |
| APPLICANT: | Southern Planning Consultants |
| LAND: | 48 James Street, Lang Lang VIC 3984 |
| PROPOSAL: | Development of the land for six (6) dwellings |
| PLANNING CONTROLS: | Neighbourhood Residential Zone Schedule 1 |
| NOTIFICATION \& OBJECTIONS: | Pursuant to Section 55 of the Planning and <br> Environment Act 1989, the application was advertised <br> by the placing of a sign on site and notices in the mail <br> to adjoining property owners. <br> Four (4) objections have been received to date. |
| KEY PLANNING |  |
| CONSIDERATIONS: | Clause 55 - Rescode <br> Neighbourhood character <br> Neighbourhood Residential Zone <br> Side and rear setbacks |


|  | Dwelling density <br> Integration with the street <br> Amenity <br> Lang Lang Township Strategy |
| :--- | :--- |
| RECOMMENDATION: | Refuse |

## Background

The subject site is located on the east side of James Street, approximately 600 metres from the Lang Lang shopping strip on Westernport Road to the northwest. The site is irregular in shape with a frontage to James Street of 15.0 m and a depth ranging between 64.4 m and 81.2 m . It is $2,416 \mathrm{sqm}$ in size and currently contains a single storey brick residence, detached galvanised iron garage, and a small garden shed. The site is located in an established residential area of Lang Lang.

It is proposed to demolish the existing dwelling and remove several of the trees to develop the land with six dwellings.

There have been no recent previous planning permits on this site.

## Subject Site



The site is located on the eastern side of James Street, Pakenham and is known as Lot 30 on Plan of Subdivision 210097B.

A crossover is located on the northern part of the frontage and there is a 3 m wide drainage and sewerage easement in the north corner of the property.

The site currently contains a single storey brick residence, detached galvanised iron garage, and small garden shed.

The topography of the land is relatively flat with a cluster of trees located to the southeast corner and a few scattered trees elsewhere.

Due to the orientation and irregular shape of the lot, the boundaries will be referred to as follows throughout this report:


The main characteristics of the surrounding area are:

## North/north-western (side):

- Directly north/northwest of the site is 46 James Street which is 1075 sqm in size containing a single storey weatherboard dwelling with a detached galvanised iron garage to the rear of the dwelling. The dwelling is set back 9.0 m from the street and is approximately 1.0 m from the southern side boundary and a generous 8.3 m from the northern side boundary. Secluded private open space is located in the southeast part of the allotment.

South/southwestern (side):

- 50 James Street is the immediate neighbour to the subject site facing the same street and is 1004sqm in size containing a single storey weatherboard dwelling with small garden shed. The dwelling is set back 7.0 m from the street and is 4.7 m from the northern side boundary and 5.9 m from the secondary street (Langley Boulevard). Secluded private open space is located in the eastern part of the allotment.


## North-eastern/south-eastern (rear):

- Directly northeast of the site is 22 and 24 Papley Avenue which are similarly sized residential allotments containing a single storey brick dwelling each. Their secluded private open space is located to the rear, to the west of the allotments.
- The properties on Alloway Street to the southeast (number 1, 3 and 5) are similarly sized residential allotments all containing a single storey brick dwelling with secluded private open space to the rear in the northern part of the allotments.
- Number 7 and 9 Alloway Street to the southeast are vacant residential allotments.


## Western (front):

- Directly west of the site is the access road (James Street). Across the road are similarly sized residential allotments all containing single storey brick dwellings. Street setbacks for these dwellings range between approximately 7.8 m and 10.5 m .

More broadly in the area, dwellings are predominantly single storey and constructed of brick or weatherboard. Multi-dwelling allotments are uncommon in the area and are typically two to three dwellings on an allotment. Multi-dwelling allotments are typically designed such that they appear as a single dwelling from the street frontage by siting additional dwellings well behind the front dwelling.

Westernport Road is approximately 500 m to the north with the Lang Lang shopping strip on Westernport Road approximately 600 m away.

Further to the east of the site beyond the nearby residential development is rural/agricultural land zoned for Farming Zone, Rural Conservation Zone, and Green Wedge Zone. Lang Lang Sands (quarry) is located beyond these rural areas, approximately 950 m from the subject site.

## Relevance to Council Plan

2.1 Our Community - Our diverse community requirements met
2.1.2 Promote access to and encourage, a mix of housing types to cater for the varying needs of people in the Cardinia community.

### 3.3 Our Environment - Enhanced natural environment

3.3.2 Reduce Council's energy consumption and help the community to do likewise.
3.5 Our Environment - Balanced needs of development, the community and the environment 3.5.2 Plan for the development of the urban growth area with a mix of residential, commercial, employment, recreational and community activities to meet the needs of our growing community in a sustainable way.
3.5.3 Provide for the sustainable development of rural townships while taking into account their existing character and community needs.

## Proposal

Approval is sought for the development of the land for six (6) single storey dwellings with low pitched tile roofs. Each dwelling includes three bedrooms, an open plan living/meals area and is provided with an attached double car garage.

## Site Layout

The site is irregular in shape and access to all six (6) dwellings is proposed by a common driveway along the middle of the site and a common crossover to James Street. Dwelling 1 and Dwelling 2 will be located on the northern portion of the allotment and Dwellings 3, 4, 5 and 6 will be located on the southern portion of the allotment.

The development will be set back from the street 8.5 m . The dwellings are orientated to face the common driveway between them (with the exception of Dwelling 1), with Dwelling 1 and Dwelling 6 being the most visible from the street frontage.

The development will have an overall height ranging from 4.6 m (dwelling 1) and 4.9 m (dwelling 2) with the other dwellings ranging in height between those values.

The proposed dwellings provide a design incorporating weatherboard cladding and render in light brown and black/grey palettes. Each dwelling is articulated with a visible covered entry to the dwelling and garage recessed behind the front line of the dwelling.

## Visitor Parking and Access:

Each dwelling is provided with an attached enclosed double car garage and one visitor parking space is provided at the beginning of the common driveway. The existing crossover will be removed and relocated to the south of the frontage.

## Site Coverage:

The details of the proposed dwellings are as follows:

| Dwelling | Building footprint | Private Open Space |
| :--- | :--- | :--- |
| 1 | 166.6 | 50.0sqm secluded private open space with a minimum dimension of 7.2 m. <br> The secluded private open space is south-facing with Dwelling 1 on the <br> northern and western sides of the space. |
| 2 | 166.4 | 122.0sqm secluded private open space with a minimum dimension of <br> 11.4m. The secluded private open space is east and north-facing with <br> Dwelling 2 on the western side of the space. |
| 3 | 158.0 | 54.0sqm secluded private open space with a minimum dimension of 5.0 m. <br> The secluded private open space is south-facing with Dwelling 3 on the <br> northern side of the space. |
| 4 | 158.0 | 54.0sqm secluded private open space with a minimum dimension of 5.4 m. <br> The secluded private open space is south-facing with Dwelling 4 on the <br> northern side of the space. |
| 5 | 162.8 | 65.0sqm secluded private open space with a minimum dimension of 5.4 m. <br> The secluded private open space is south-facing with Dwelling 5 on the <br> northern side of the space. |
| 6 |  | 115.0sqm secluded private open space with a minimum dimension of <br> 10.8m. The secluded private open space is south-facing with Dwelling 6 on <br> the northern side of the space and the neighbouring garden shed on part of <br> the western side of the space. |

The overall site coverage of the development is 965.0 sqm ( $39.9 \%$ of the site). The development provides 1061.0 sqm of permeable space ( $43.9 \%$ of the site). The garden area provided is 1024.0 sqm ( $42.4 \%$ of the site).

## Setbacks

The development is set back 8.5 m from the street, between 1.2 m and 2.7 m from the north/north-western side boundary, between 1.8 m and 6.8 m from the southern/western side boundary, between 4.0 m and 9.8 m from the south-eastern rear boundary and between 2.2 m and 11.4 m from the north-eastern rear boundary.

## Landscaping and Vegetation

Thirteen (13) of the existing trees will be removed, primarily from the cluster of trees at the rear fence line, to accommodate the proposed development. The mature tree within the front setback of the existing dwelling will be retained and accommodated within the secluded private open space of Dwelling 1 . Some of the trees within the cluster of trees at the rear fence line will be retained and accommodated within the secluded private open spaces of Dwellings $2,3,4,5$ and 6 . No street trees will be impacted.

Approximately 118 sqm of garden is provided within the front setback of the development. Smaller areas of landscaping are provided along the common accessway and front of the dwellings. Dwellings 1, 3, 4, 5 and 6 all have south-facing secluded private open space. Dwelling 2's secluded private open space is east-facing.

A landscape plan has not been provided but would form a condition should a permit issue.
There are no front fences proposed. Timber paling fences are provided to each boundary as follows: 1.85 m to the northern and north-western boundary, 1.9 m to the north-eastern boundary, 1.5 m to the south-western boundary, and 1.6 to the southern boundary. The plans indicate that a "high chain wire mesh" is provided to the south-eastern boundary, with no exact height specified. Timber palings 1.8 m high are provided between the secluded private open spaces of each dwelling.

## Dwelling 1

Dwelling 1 will be located within the front of the allotment and has a building footprint of 166.6 sqm. This dwelling contains three bedrooms, an open plan living/meals area and an attached double garage. It is provided with 50.0 sqm of secluded private open space with a minimum dimension of 7.2 m and is accessible from the living/meals area. The secluded private open space is south-facing and partially enclosed on its western, northern and eastern walls by the dwelling. A tree is provided in this space.

Each of the bedrooms and the living/meals areas accommodate northern sunlight.

## Dwelling 2

Dwelling 2 will be attached to the garage of Dwelling 1 and has a building footprint of 166.4 sqm . This dwelling contains three bedrooms, an open plan living/meals area and an attached double garage. It is provided with 122.0 sqm of secluded private open space with a minimum dimension of 11.4 m and is accessible from the living/meals area. The secluded private open space is east and north-facing and bordered on its western side by the dwelling. A tree is provided in this space.

Bed 2, Bed 3 and the living area will accommodate northern sunlight. The master bedroom and part of the meals area have south-facing windows.

## Dwelling 3

Dwelling 3 is the fourth and rear-most of the dwellings located within the southern portion of the allotment and has a building footprint of 158.0 sqm . This dwelling contains three bedrooms, an open plan/living meals area and an attached double garage. The dwelling is provided with 54.0 sqm of secluded private open space with a minimum dimension of 5.0 m and is accessible from the living/meals area. The secluded private open space is south-facing and is bordered on its northern side by the dwelling. Four trees are provided within this space.

It is noted on the plans that the bedroom labels are duplicated (there are two B3) which will need to be corrected if a permit should issue. The northern-most Bed 3 will accommodate northern sunlight. The second Bed 3 and part of the living/meals area have either east or west-facing windows, whilst the master bedroom and part of the living/meals areas have south-facing windows.

## Dwelling 4

Dwelling 4 is the third of the dwellings located within the southern portion of the allotment and has a building footprint of 158.0 sqm. This dwelling contains three bedrooms, an open plan/living meals area and an attached double garage. The dwelling is provided with 54.0 sqm of secluded private open space with a minimum dimension of 5.4 m and is accessible from the
living/meals area. The secluded private open space is south-facing and is bordered on its northern side by the dwelling. Two trees are provided within this space.

It is noted on the plans that the bedroom labels are duplicated (there are two B3) which will need to be corrected if a permit should issue. The northern-most Bed 3 will accommodate northern sunlight. The second Bed 3 and part of the living/meals area have either east or west-facing windows, whilst the master bedroom and part of the living/meals areas have south-facing windows.

## Dwelling 5

Dwelling 5 is the second of the dwellings located within the southern portion of the allotment and has a building footprint of 158.0 sqm. This dwelling contains three bedrooms, an open plan/living meals area and an attached double garage. The dwelling is provided with 65.0 sqm of secluded private open space with a minimum dimension of 5.4 m that is accessible from the living/meals area. The secluded private open space is south-facing and bordered on its northern side by the dwelling. Five trees are provided within this space.

It is noted on the plans that the bedroom labels are duplicated (there are two B3) which will need to be corrected if a permit should issue. The northern-most Bed 3 will accommodate northern sunlight. The second Bed 3 and part of the living/meals area have either east or west-facing windows, whilst the master bedroom and part of the living/meals areas have south-facing windows.

## Dwelling 6

Dwelling 6 is the first and frontmost of the dwellings located within the southern portion of the allotment and has a building footprint of 162.8 sqm . This dwelling contains three bedrooms, an open plan/living meals area and an attached double garage. The dwelling is provided with 115.0sqm of secluded private open space with a minimum dimension of 10.8 m that is accessible from the living/meals area. The secluded private open space is south-facing and bordered on its northern side by the dwelling. Three trees are provided within this space.

It is noted on the plans that the bedroom labels are duplicated (there are two B3) which will need to be corrected if a permit should issue. The northern-most Bed 3 and master bedroom will accommodate northern sunlight. The second Bed 3 and the living/meals area have southfacing windows.

## Planning Scheme Provisions Planning Policy Framework (SPPF)

The relevant clauses of the PPF are:

- Clause 15.01-2S Building Design
- Clause 15.01-5S Neighbourhood Character
- Clause 16.01-1S Housing Supply
- Clause 16.01-2S Housing Affordability
- Clause 18.02-4S Car Parking
- Clause 18.01 Transport


## Local Planning Policy Framework (LPPF)

The relevant clauses of the LPPF are:

- Clause 21.03-1 Housing
- Clause 21.03-4 Rural townships
- Clause 21.08-1 Lang Lang


## Relevant Particular/ General Provisions and relevant incorporated or reference documents

The relevant provisions/ documents are:

- Clause 52.06 Car Parking
- Clause 55 Two or more dwellings on a Lot and Residential Buildings
- Clause 65 Decision Guidelines
- Clause 66 Referral and Notice Provisions


## Lang Lang Township Strategy, July 2009

This proposal is affected by Cardinia Shire's Lang Lang Township Strategy, adopted by Council 20 July 2009, in particular:

- Provide for the staged growth of Lang Lang to accommodate a population of 2,083 people by the year 2016 and 2,409 people by the year 2021
- Protect and enhance the 'rural character' of the Lang Lang Township
- Ensure the long term sustainability of the community by providing residential housing for a range of household groups
- Ensure infill residential development is integrated with existing developments and respects the existing character of the township.

The subject site is identified in this strategy under Precinct 5 - New Residential Estates. The Lang Lang Township Strategy outlines a preferred character statement and character guidelines for new development within this precinct, which will be addressed and assessed later in the report.

## Zone

The land is subject to the Neighbourhood Residential Zone - Schedule 1.

## Overlays

The land is not subject to any overlays.

## Planning Permit Triggers

The proposal for six dwellings requires a planning permit under the following clauses of the Cardinia Planning Scheme:

- Pursuant to Clause 32.09-6 of the Neighbourhood Residential Zone, a planning permit is required to construct two or more dwellings on a lot. The proposal must also comply with relevant standards of Clause 55 of the Cardinia Planning Scheme. Schedule 1 of the Neighbourhood Residential Zone does not vary any of the requirements of Clause 55.


## Public Notification

The application has been advertised pursuant to Section 52 of the Planning and Environment Act 1987, by:

- Sending notices to the owners and occupiers of adjoining land.
- Placing a sign on site

Council has received four (4) objections to date.
The key issues that were raised in the objections are:

- Housing density
- Loss of privacy
- Devaluation of properties
- Increase number of vehicles in the area
- Visitor parking
- Noise
- Loss of trees as they contribute to shading and wildlife habitat


## Referrals

## External Referrals

No external referrals were required.

## Internal Referrals

## Traffic

The application was referred to Council's Traffic team for their comment. Traffic had no objection to the proposal and did not request any conditions.

## Engineering

The application was not referred to Council's Engineering team. Standard engineering conditions would be applied on any permit issued ensuring appropriate drainage measures on site and connection to existing utility services in the area for each dwelling.

## Landscape

The application was not referred to Council's Landscape team. Standard landscaping conditions would be applied on any permit issued ensuring the preparation of a landscape plan and the completion and maintenance of landscaping within the development.

## Discussion

The application has been assessed against the decision guidelines of all relevant clauses of the Cardinia Planning Scheme and the proposed development is determined to be overall inconsistent with these requirements.

Planning Policy Framework (PPF) and Local Planning Policy Framework (LPPF)
A number of state and local policies are relevant to this application that aim to ensure dwelling design achieves attractive and diverse neighbourhoods, and to encourage a diversity in housing, close to activity centres, to meet the needs of future and existing residents.

Clause 15.01-2S (Building Design) seeks to achieve building design outcomes that contribute positively to the local context and enhance the public realm.

Clause 15.01-5S (Neighbourhood Character) seeks to recognise, support and protect neighbourhood character, cultural identity, and sense of place.

Clause 16.01-1S (Housing supply) seeks to facilitate well-located, integrated and diverse housing that meets community needs.

Clause 16.0-1-2S (Housing affordability) seeks to delivery more affordable housing closer to jobs, transport and services.

Clause 18.02-4S (Car Parking) seeks to ensure an adequate supply of car parking that is appropriately designed and located.

Clause 21.03-1 (Housing) provides local context to Clause 16, with an objective to encourage diversity in housing to meet the needs of existing and future residents.

Clause 21.03-4 (Rural townships) provides guidance on the development of Cardinia's rural townships, including Lang Lang, with objectives to provide for the sustainable development of townships in the municipality having regard to environmental and servicing constraints and maintaining and enhancing the distinct character and environmental qualities of each of the townships.

Clause 21.08-1 (Lang Lang) provides guidance on the development of the Lang Lang local area and incorporates the Lang Lang Township Strategy with the objective to ensure proposed uses and developments are generally consistent with the Lang Lang Township Strategy, including the Lang Lang Framework Plan.

## Lang Lang Township Strategy

The proposal fails to have regard to key objectives in the Lang Lang Township Strategy, including:

- Provide for the staged growth of Lang Lang to accommodate a population of 2,083 people by the year 2016 and 2,409 people by the year 2021
- Protect and enhance the 'rural character' of the Lang Lang Township
- Ensure the long term sustainability of the community by providing residential housing for a range of household groups
- Ensure infill residential development is integrated with existing developments and respects the existing character of the township.

Within the immediate surrounds of the site are all single dwelling allotments with generous setbacks. A few multi-unit developments are located further north up James Street and nearby on Salisbury Street. However, these multi-until developments consist of two to three dwellings maximum and still maintain generous spacing between the dwellings on site (average 3 m approximately) and to neighbouring properties (approximately 3 m minimum).

The proposal consists of six dwellings that are all within close spacing of each other (1 metre) or fully attached. Dwellings 1 and 2 are located close to the dwelling on the neighbouring property to the north, being set back between 2.2 and 3 m from the dwelling on the abutting property.
The subject site is identified in the Lang Lang Township Strategy under Precinct 5 - New Residential Estates. The character guidelines relevant to this application are assessed below. Six of the nine guidelines outlined below are noncompliant.

| Guideline | Assessment |
| :--- | :--- |
| Encourage diversity of development <br> styles. | Does not comply. <br> The development provides for six dwellings which are all three <br> bedrooms in very similar layouts and identical colour/material <br> palettes. Whilst this does provide some diversity in the overall <br> area which consists predominantly of single dwelling |


|  | allotments, it is considered too far a departure from the existing character of the area. |
| :---: | :---: |
| Maintain a sense of spaciousness between allotments of the residential areas through: <br> - No front fences or if fenced, low front fences or open wire fences to allow gardens and nature strips to merge <br> - Providing sufficient open space or garden areas <br> - Retain existing vegetation <br> - Providing of new trees and garden spaces | Does not comply. <br> A sense of spaciousness is not provided between allotments due to the close proximity of Dwellings 1 and 2 to the northern boundary ( 1.2 m ). This is further emphasised by their proximity to the dwelling on the northern property boundary, being set back only between 2.2 and 3 m from this dwelling. <br> No front fences are proposed, some existing vegetation is retained, and some new trees are provided. However, the development requires the removal of several large mature trees and five of the six private open spaces of the dwellings are south facing or otherwise partially enclosed by built form blocking northern light and are thus considered insufficient areas of open space. |
| Maintain a sense of spaciousness between buildings with: <br> - Minimum side setback of 2.5 m <br> - Providing a minimum front setback of 7 m or no less than the average setback of the adjoining two dwellings <br> - Maximum building site coverage of $40 \%$ of the lot size | Does not comply. <br> A sense of spaciousness between buildings is not achieved due to the close proximity of Dwellings 1 and 2 to the northern boundary ( 1.2 m ). This is further emphasised by their proximity to the dwelling on the northern property boundary, being set back only between 2.2 and 3 m from this dwelling. Furthermore, the dwellings on site are within close spacing of each other (1m) or fully attached. <br> The minimum side setbacks are not achieved, as the development provides side setbacks of 1.2 m and 1.9 m . <br> The minimum front setback and building site coverage is met. |
| Maintain continuity of building rhythm along streets with appropriate building frontages. | Does not comply. <br> The streetscape consists predominantly of single dwelling allotments with some two or three dwelling allotments. Of those that are multi-dwelling allotments, the additional dwellings are sited behind the front dwelling and are predominantly hidden behind the built form of the front-most dwelling. <br> The irregular shape of the lot for the subject site and the site layout of a common accessway with dwellings on either side of the accessway breaks up the streetscape rhythm of the appearance of single dwellings. From the streetscape and common accessway, at least three of the dwellings will be easily visible (Dwellings 1, 2 and 6). |
| Ensure protection and conservation of native vegetation including street trees and roadside vegetation. | Does not comply. <br> The development requires the removal of 13 existing trees of varying values of retention, several of which are mature and healthy. Five other trees will require tree protection fencing to mitigate development impacts. <br> An analysis of the surrounding area particularly within James Street and Salisbury Street indicates that mature vegetation is |


|  | well retained and maintained in this area, contributing to an <br> overall character of well-vegetated properties. This is in <br> contrast to the newer properties developed to the southeast <br> and northeast of the subject site, where allotments are fully <br> cleared of vegetation and the dwelling takes up the majority of <br> the allotment. <br> No street trees are impacted. |
| :--- | :--- |
| Encourage the inclusion of native <br> vegetation and gardens in new <br> developments. | Complies. <br> Of the trees that have been retained, they have been <br> incorporated into the private open spaces of the development. |
| Maintain a high level of quality in the <br> design and construction of new <br> buildings, as well as a continuity with <br> the character of the areas existing <br> built form. | Complies. <br> The built form of each individual dwelling is consistent with <br> other building styles in the area. Dwellings are single storey <br> and constructed of weatherboard and render with pitched tiled <br> roofs, which complements the dwelling designs in the area <br> which are single storey, brick or weatherboard, and have |
| pitched tiled roofs. |  |

## State and Local Planning Policy

The proposal is not compatible with the residential character of the area due to the number of dwellings, the removal of significant vegetation, the side setbacks, the lack of spacing between the dwellings, and the breaking of the rhythm of the appearance of single dwelling allotments from the street frontage. Furthermore, the site is not well located to shops and public transport where typically higher density developments are encouraged and supported by state and local planning policy.

The number of dwellings proposed is inconsistent with the character of the area. Within the immediate surrounds of the site are all single dwelling allotments with generous setbacks. A few multi-unit developments are located further north up James Street and nearby on Salisbury Street. However, these multi-until developments consist of two to three dwellings maximum and still maintain generous spacing between the dwellings on site (average 3 m approximately) and to neighbouring properties (approximately 3 m minimum).

The proposal consists of six dwellings that are all within close spacing of each other (1 metre) or fully attached. Dwellings 1 and 2 are located close to the dwelling on the neighbouring property to the north, being set back between 2.2 and 3 m .

The irregular shape of the lot for the subject site and the site layout of a common accessway with dwellings on either side of the accessway breaks up the streetscape rhythm of the appearance of single dwellings. From the streetscape and common accessway, at least three of the dwellings will be easily visible (Dwellings 1,2 and 6 ).

The development does not provide greater housing diversity and affordability as each of the six dwellings are three bedrooms, which is typical of bulk standard residential housing. There is no variance in the number of bedrooms or dwellings sizes provided and each is designed with a nearly identical design and the same materials and colours.

Significant vegetation is to be removed, including several trees which are mature and healthy and contribute to a well-vegetated character of the area. An analysis of the surrounding area particularly within James Street and Salisbury Street indicates that mature vegetation is well retained and maintained in this area, contributing to an overall character of well-vegetated properties. This is in contrast to the newer properties developed to the southeast and northeast of the subject site, where allotments are fully cleared of vegetation and the dwelling takes up the majority of the allotment.

Additionally, several of the trees will require tree protection fencing to protect them from development impacts. The remaining trees that are retained are incorporated into the development and some new trees are provided, but this is not considered to be a sufficient replacement for the extensive loss of tree canopy. There is not sufficient replacement planting provided; nor is there room to provide sufficient replacement planting within the development.

Furthermore, the development fails to meet all the objectives of Clause 55 (ResCode). Specifically, the following eight (8) standards/objectives are failed or required to be addressed via condition, which is further discussed in the Clause 55 section below: Standard B1 (Neighbourhood character), Standard B2 (Residential policy), Standard B5 (Integration with the street), Standard B10 (Energy efficiency), Standard B13 (Landscaping), Standard B17 (Side and rear setbacks), Standard B22 (Overlooking), Standard B29 (Solar access to open space).

It also fails to appropriately address Council's local policy for rural townships, including not conforming to the Lang Lang Township Strategy, further discussed in the below sections.

It is considered that the proposal inadequately responds to the above and does not complement the existing or preferred neighbourhood character of the street and surrounding area. The extent of failed Standards under Clause 55 and noncompliance with the Lang Lang Township Strategy is indicative of an overdevelopment of the site.

## Neighbourhood Residential Zone - Schedule 1

The purpose of the Neighbourhood Residential Zone is to recognise areas of predominantly single and double storey residential development and manage and ensure that development respects the identified neighbourhood character, heritage, environmental or landscape characteristics.

Pursuant to Clause 32.09-6, a permit is required to construct two or more dwellings on a lot. The decision guidelines of this zone cover a number of matters such as the purpose of the zone, the requirements of Clause 55, the impact of overshadowing, and the spacing of buildings.
The proposed development does not provide for a diversity of housing types and is not well located to services and public transport. It does not respect the existing or preferred residential character of the area and is inconsistent with the purpose and decision guidelines of the Neighbourhood Residential Zone.

The surrounding area generally consists predominantly of single dwelling allotments that are single storey and constructed of brick or weatherboard. Multi-dwelling allotments are
uncommon in the area and are typically two to three dwellings on an allotment. Multi-dwelling allotments are typically designed such that they appear as a single dwelling from the street frontage by siting additional dwellings well behind the front dwelling. It is considered that the proposal for six dwellings will not fit within this range of development patterns and will be a significant break from the existing character of the area and the preferred character of the area (Lang Lang Township Strategy).
It fails to meet 6 of the 9 relevant character design guidelines for Precinct 5 in Council's Lang Lang Township Strategy including guidelines for dwelling diversity, sense of spaciousness between buildings and allotments, continuity of building rhythm, retention of vegetation, and integration with the street.

It also fails to meet the requirements of Clause 55, as discussed in the below sections. Furthermore, the subject site is considered to be located too far from shops (600m) and public transport (none anywhere nearby) for a development of this density. It is therefore not supported by state and local planning policy.
The Neighbourhood Residential Zone enforces requirements of maximum building height and minimum garden area provisions. The proposal meets these requirements as the building is single storey in height (max height 4.9 m ) and provides $42.4 \%$ of the site as garden area.

## Clause 55 Two or More Dwellings on a Lot and Residential Buildings

The proposed development is considered inappropriate for the site and surrounds and does not comply with all the relevant objectives and standards of Clause 55. A summary of the assessment of the development against Clause 55 is listed below:
Clause 55.02 Neighbourhood character and infrastructure:
Standard B1 (Neighbourhood character) - Does not comply. The proposed development is not appropriate to the neighbourhood and does not respect the existing or preferred neighbourhood character of the area. The design response does not consider the existing lower-density character of the area where single dwelling allotments are predominant and any multi-unit developments are only two or three dwellings and provide the appearance of a single dwelling from the street frontage. The proposal also fails to address the preferred character of the area as outlined in the Lang Lang Township Strategy. This has been assessed above and found to be noncompliant and does not respect the preferred character of the New Residential Estate areas. The design response does not respect the existing or preferred character of the area.

Standard B2 (Residential policy) - Does not comply. As outlined above, the proposal is overall noncompliant with state and local housing policies as it does not respect the existing or preferred neighbourhood character. The development is located more than 500m from the nearest local shopping centre and does not have access to any public transport within the surrounding area and thus does not satisfy this standard.
Standard B3 (Dwelling diversity) - Not applicable as the development is for fewer than 10 dwellings.
Standard B4 (Infrastructure) - Complies. The development is located within an established residential with access to existing reticulated services. Should a permit issue, standard engineering conditions will ensure that the site is appropriately drained and connected to services to Council's satisfaction.

Standard B5 (Integration with the street) - Does not comply. The development is not integrated with the street as the development presents as predominantly built form that is non-engaging. From the street, the visual would be of driveway, car parking space, high timber palings (from the enclosed secluded private open space of Dwelling 1), garages, and the side of the building (Dwelling 6) with no windows engaging. Only Dwelling 1 engages with the street with its entry and master bedroom windows facing onto the street. Dwellings 2 and 6 would be visible from the street or common accessway but are side-facing.
Clause 55.03 Site layout and building massing:

Standard B6 (Street setback) - Complies. The required street setback is achieved as the development provides a street setback of 8.5 m where the required minimum is 8.0 m within ResCode and 8.5 m within the Lang Lang Township Strategy.
Standard B7 (Building height) - Complies. The development does not exceed the maximum building height of 9 metres as the development is single storey with an overall height ranging between 4.6 m (dwelling 1 ) and 4.9 m (dwelling 2 ) with the other dwellings ranging in height between those values.

Standard B8 (Site coverage) - Complies. The development does not exceed the maximum site coverage of $60 \%$ within ResCode or the $40.0 \%$ maximum within the Lang Lang Township Strategy as the development has $39.9 \%$ site coverage.

Standard B9 (Permeability and stormwater management) - Complies. The development maintains $43.9 \%$ permeable space, well within the requirements of $20 \%$ of the site. The site is located within an established residential area with availability of connection to reticulated services. Standard engineering conditions would be placed on any permit issued to ensure the site is appropriately drained and serviced to Council's satisfaction.

Standard B10 (Energy efficiency) - Does not comply. The living areas and private open spaces of the dwellings do not have sufficient access to solar energy. Dwellings $3,4,5$ and 6 all have south-facing secluded private open space and several south-facing windows within the bedrooms and living/meals areas. Dwelling 1 also has south-facing secluded private open space and furthermore has the built form of the dwelling enclosing it on its north-most facing boundary, further shadowing the area. Dwelling 2 is the only unit which would be considered to satisfy this standard fully as it has north-facing secluded private open space and has utilised several northfacing windows within its living areas and bedrooms.
Standard B11 (Open space) - Not applicable as there is no public or communal open space provided within or adjacent to the development.

Standard B12 (Safety) - Complies. The layout of the development sufficiently provides for the safety and security of residents and property. Entrances to dwellings are viewable and accessible from the internal accessway which has good passive surveillance internally from overlooking windows of the dwellings. Private spaces are protected through the use of built form or fencing.
Standard B13 (Landscaping) - Does not comply. The development requires the removal of 13 existing trees of varying values of retention, several of which are mature and healthy. Five other trees will require tree protection fencing to mitigate development impacts. Whilst no street trees are impacted and the remaining trees are incorporated into the new development, there is not sufficient replacement planting provided, nor enough space to incorporate replacement planting, to accommodate for the significant loss of mature vegetation which also contributes to the character of the area (as discussed under the Lang Lang Township Strategy).
Standard B14 (Access) - Complies. The design of the vehicle crossover respects the neighbourhood character as only one crossing is provided and its width does not exceed $40 \%$ of the street frontage.
Standard B15 (Parking location) - Complies. Parking facilities are conveniently located and residents are protected from vehicular noise within the development. Each dwelling has a garage that is located immediately adjacent to the dwelling entry or, in the case of Dwelling 1, provided with an internal door directly into the dwelling. All bedroom windows are located a minimum 1.5 m from the accessway to minimise vehicular noise.

## Clause 55.04 Amenity impacts

Standard B17 (Side and rear setbacks) - Does not comply. The development meets the standard requirement of B17 however does not satisfy the objective of this clause which is to respect the existing or preferred character in terms of side and rear setbacks. A development should meet the standards however must meet the objectives of Clause 55. It is considered
that the side setbacks are inconsistent with both the existing and preferred neighbourhood character. The existing character of side setbacks is an average of 3.0 m within James Street and Salisbury Street, however the side setbacks of the development are a minimum 1.2 m to the north-north-western boundary and 1.8 from the southern/western boundary. Furthermore, the development fails to meet the preferred character of side setbacks as outlined in the Lang Lang Township Strategy of a minimum 2.5 m .

Standard B18 (Walls on boundaries) - Not applicable as there are no walls on or within 200 mm of a side or rear boundary.

Standard B19 (Daylight to existing windows) - Complies. The development allows adequate daylight into existing habitable room windows as it is set back a minimum of 3.1 m from the habitable room windows of the dwelling on the abutting allotment (46 James Street).
Standard B20 (North-facing windows) - Complies. The development allows adequate solar access to existing north-facing habitable room windows as it is set back a minimum of 15.4 m from the north-facing habitable room windows of the dwelling on the abutting allotment (3 Alloway Street).
Standard B21 (Overshadowing open space) - Complies. The development does not significantly overshadow existing secluded private open space as it is single storey and significantly set back from areas of secluded private open space on abutting allotments.
Standard B22 (Overlooking) - Does not comply. Despite the development being single storey, boundary fencing is not appropriate to prevent overlooking. The southern and western side boundary fencing is only 1.6 m and 1.5 m high respectively, which is not a sufficient height to prevent overlooking to the abutting property's secluded private open space (50 James Street) once the development is completed with finished floor levels. The south-eastern rear boundary fence is nominated as "high chain wire mesh" which is not a sufficiently obscured material to prevent overlooking to the abutting properties' secluded private open space areas (3 and 5 Alloway Street). Should a permit issue, the boundary fencing should be modified in these areas to be of a sufficient height and material to prevent overlooking - fencing to a minimum height of 1.7 m from the finished floor levels of the new dwellings.
Standard B23 (Internal views) - Complies. The development sufficiently limits views into the secluded private open space areas and habitable room windows within the development through the provision of 1.8 m high timber paling internal fencing between the dwellings.
Standard B24 (Noise impacts) - Complies. The extent of noise expected is to be of a typical residential level and there are no significant noise impacts nearby the development.

## Clause 55.05 On-site amenity and facilities

Standard B25 (Accessibility) - Complies. The dwelling entries are ground floor and are easily accessible for people with limited mobility.
Standard B26 (Dwelling entry) - Complies. Each dwelling is provided with its own sense of identity through the provision of a sheltered entryway that is easily identifiable from the street or shared accessway.

Standard B27 (Daylight to new windows) - Complies. New habitable room windows within the development are provided with sufficient daylight by virtue of their facing directly to the outdoors where there is a minimum area of 3 square meters and dimension of at least 1 metre clear to the sky.
Standard B28 (Private open space) - Complies. The areas of private open space are of sufficient size and minimum dimension to be useable and adequate. Specifically, each dwelling is provided with secluded private open space areas as follows (Dwelling $\times$ (area of private open space / minimum dimension) : Dwelling 1 ( $50.0 \mathrm{sqm} / 7.2 \mathrm{~m}$ ), Dwelling 2 ( $122.0 \mathrm{sqm} / 11.4 \mathrm{~m}$ ), Dwelling 3 (54.0sqm / 5.0m), Dwelling 4 (54.0sqm / 5.4m), Dwelling 5 ( $65.0 \mathrm{sqm} / 5.4 \mathrm{~m}$ ), Dwelling 6 (115.0sqm / 10.8m).

Standard B29 (Solar access to open space) - Does not comply. The development does not provide suitable solar access to areas of secluded private open space throughout the development. Specifically, Dwellings 3, 4, 5 and 6 all have south-facing secluded private open space. Dwelling 1 also has south-facing secluded private open space and furthermore has the built form of the dwelling enclosing it on its north-most facing boundary. Dwelling 2 is the only unit which would be considered to satisfy this standard fully as it has north-facing secluded private open space.
Standard B30 (Storage) - Complies. Each dwelling is provided with adequate storage space in the form of a minimum 6 cubic metres accessible within the garage areas.

## Clause 55.06 Detailed design

Standard B31 (Design detail) - Complies. The design of each dwelling complements the existing built form in the area. The dwellings are single storey and constructed of weatherboard and render with pitched tiled roofs, which complements the dwelling designs in the area which are single storey, brick or weatherboard, and have pitched tiled roofs. The design of the dwellings also satisfies the requirements for design detail outlined within the Lang Lang Township Strategy.

Standard B32 (Front fences) - Not applicable as no front fences are proposed.
Standard B33 (Common property) - Complies. The site is designed such that car parking areas, the common accessway, and site facilities are practical, attractive and easily maintained and will avoid future management difficulties in areas of common ownership. Public and private areas within the development are clearly delineated through the use of built form and internal fencing to separate these areas. The common accessway is sufficiently wide enough to enable the residents of each dwelling to enter and exit in a forward direction, and the visitor parking area is easily identifiable from the entrance and accessible. Sufficient areas are available for planting and greenery in the common areas to make them attractive and practical to maintain.

Standard B34 (Site services) - Complies. The development is designed that site services can be easily installed and maintained and are accessible and adequate. Bin and recycling areas are set aside within the secluded private open space of each dwelling and mailboxes are located at the front of the property with easy access by Australia Post. Furthermore, each dwelling is provided with either a 2.5 L or 3.0 L water tank to ease the impact on water services by the development.

## Clause 52.06 Car Parking

The proposed development includes two (2) car parking spaces within a double car garage for each of the three-bedroom dwellings which is consistent with this clause. The proposed design has incorporated internal dimensions for the garages and accessway width is consistent with minimum requirements. One visitor car park is provided that is easily identifiable from the street in accordance with requirements. Council's Traffic team have reviewed the plans and provided consent and requested no conditions. As such, the proposal is consistent with the car parking and access requirements of the Cardinia Planning Scheme.

## Objector Concerns

Each objector concern is outlined and addressed below:
Housing density
The objectors at 46 James Street and 24 Papley Avenue are concerned about the density of housing within this development.

As has been previously discussed in State and Local Policy sections and under the Clause 55 assessment, it is considered that the density of this proposed development is inappropriate to the character of the area. The design response does not consider the lower-density character of
the area where single dwelling allotments are predominant and any multi-unit developments are only two or three dwellings and provide the appearance of a single dwelling from the street frontage. The proposal has been assessed against the Lang Lang Township Strategy above and found to be noncompliant and does not respect the preferred character of the New Residential Estate areas. The design response does not respect the existing or preferred character of the area.

## Loss of privacy

The objectors at 50 James Street and 24 Papley Avenue are concerned about loss of privacy as a result of the development. The objectors at 50 James Street have specifically requested a new 1.95 m fence be installed at the cost of the developer to secure their privacy.

As has been previously discussed in the Clause 55 assessment, the development fails Standard B22 (Overlooking). The southern and western side boundary fencing is only 1.6 m and 1.5 m high respectively, which is not a sufficient height to prevent overlooking to the abutting property's secluded private open space ( 50 James Street) once the development is completed with finished floor levels. The south-eastern rear boundary fence is nominated as "high chain wire mesh" which is not a sufficiently obscured material to prevent overlooking to the abutting properties' secluded private open space areas (3 and 5 Alloway Street).
In response to the objector at 24 Papley Avenue, the plans demonstrate a 1.9 m high timber paling fence to this boundary which will be sufficient to prevent overlooking and loss of privacy.
Should a permit issue, the boundary fencing should be modified in these areas to be of a sufficient height and material to prevent overlooking - fencing to a minimum height of 1.7 m from the finished floor levels of the new dwellings.

## Devaluation of properties

The objectors at 46 James Street, 50 James Street, 3 Alloway Street and 24 Papley Avenue are concerned about the devaluation of their property.

Devaluation of properties is not a planning consideration.
Increase number of vehicles in the area
The objectors at 46 James Street are concerned about the increase in number of vehicles this development will bring to the area.

The proposed dwellings are three bedroom dwellings which require 2 car parking spaces each in accordance with the table to Clause 56.02 and the provision of 1 visitor car parking space as the development is six dwellings. These car parking areas have been provided on site and are designed such that vehicles can enter and exit in a forward motion and have sufficient dimensions and widths for parking in accordance with the design standards of Clause 56.02. Furthermore, Council's Traffic team have consented to the proposal. As the development meets the requirements and standards of Clause 56.02 (Car Parking) it would be unreasonable to ask for further parking to be provided.

## Visitor parking

The objectors at 50 James Street are concerned about sufficient visitor parking for the six new dwellings and wishes to avoid vehicles needing to be parked on the nature strip.

As discussed above, the development provides sufficient and appropriate visitor parking. Property owners are entitled to have their own cars or guest's cars parked in the street. Although the concern is understood, it is unreasonable for this proposal to remedy this as the design meets the requirements for visitor parking under the Planning Scheme.

## Noise

The objectors at 46 James Street are concerned about noise.
The level of noise generated by the development will not be different to normal residential noise. Furthermore, the shared accessway is located down the midline of the development and thus the level of vehicular noise to abutting properties will be minimised and sheltered by the built form of the development.

## Loss of trees as they contribute to shading and wildlife habitat

The objectors at 46 James Street and 24 Papley Avenue are concerned about the loss of trees as a result of the development. In particular, these trees provide homes to local wildlife and birds and provide significant shading from the intensity of the sun.

As discussed in the Clause 55 assessment and State and Local Planning Policy sections, the extent of tree canopy removal is not acceptable and sufficient replacement planting is not provided. The development requires the removal of 13 existing trees of varying values of retention, several of which are mature and healthy. Five other trees will require tree protection fencing to mitigate development impacts. Whilst no street trees are impacted and the remaining trees are incorporated into the new development, there is not sufficient replacement planting provided, nor enough space to incorporate replacement planting, to accommodate for the significant loss of mature vegetation.

Whilst there are no specific tree or habitat controls applying to this property, the significant loss of tree canopy is considered to be too great in the context of the character of the area. An analysis of the surrounding area particularly within James Street and Salisbury Street indicates that mature vegetation is well retained and maintained in this area, contributing to an overall character of well-vegetated properties. This is in contrast to the newer properties developed to the southeast and northeast of the subject site, where allotments are fully cleared of vegetation and the dwelling takes up the majority of the allotment. There is not sufficient space to incorporate replacement planting without significant changes to the building footprints.

## Clause 65 Decision Guidelines

The Application has been assessed against the Clause 65 Decision Guidelines, which requires Council to consider additional factors such as:

- The effect the proposal may have on the orderly planning of the area;
- The amenity of the area, proximity to public land;
- Factors likely to contribute to land degradation;
- The quality of stormwater within and exiting the site;
- Effects on native vegetation;
- Potential hazards;
- The suitability of the land for subdivision; and
- The existing use and possible future development of the land.

The application proposes six (6) single-storey dwellings, a development which is considered to be in an unsuitable location that is inconsistent with the orderly planning of the area as it is a significant increase in density in a location that is not close to amenities and public transportation. Whilst the proposal does not impact upon native vegetation, it does result in significant tree canopy loss reducing the landscape character of the area which is a dominant feature within James Street. Stormwater drainage impacts can be appropriately managed via permit conditions. The amenity of the existing residents in the area and future residents of the
development is considered to be unreasonably impacted by the failure of the design to appropriately address Clause 55 (ResCode), the Lang Lang Township Strategy and State and Local Planning Policy. Therefore, it is considered that the application is inconsistent with the decision guidelines of the applicable planning controls.

## Conclusion

The proposed development is inconsistent with the requirements of the Cardinia Planning Scheme and will cause unreasonable detriment to adjoining properties and to the future residents of the development. It is therefore recommended that a Refusal to Grant Planning Permit T200589 be issued for the Development of the land for six (6) dwellings at 48 James Street, Lang Lang VIC 3810 based on the following:

1. The proposal is inconsistent with the purpose and decision guidelines of the Neighbourhood Residential Zone in Clause 32.09.
2. The proposal is inconsistent with the existing and preferred character of the area sought by:
a. Clause 15.01-5S Neighbourhood Character
b. Clause 21.03-4 Rural townships
c. Clause 21.08-1 Lang Lang
d. Clause 55 (ResCode)
e. Lang Lang Township Strategy, July 2009
3. The proposal results in unreasonable amenity impacts to existing and future residents as protected by:
a. Clause 15.01-5S Neighbourhood Character
b. Clause 21.03-1 Housing
c. Clause 21.08-1 Lang Lang
d. Clause 55 (ResCode)
e. Lang Lang Township Strategy, July 2009
4. Inconsistency with State and Local Planning Policy, including Clause 55 (ResCode) and the Lang Lang Township Strategy as outlined in:
a. Clause 55 (Rescode)
b. Lang Lang Township Strategy


SITE CONTEXT PLAN
SITE STATISTIC

| Total Site Area | 2416.0 m 2 |
| :--- | ---: |
| Totat Sitit Cover | 965.0 m 2 |
| Totat Site Cover Ratio | $39.9 \%$ |
| Driveway Area | 39.0 m 2 |
| Total Hard Cover Area | 1355 m 2 |
| Total Hard Cover Ratio | $56.1 \%$ |
| GARDEN AREA | 1024.0 m 2 |
| Garden Area Ratio | $42.4 \%$ |

SITE PLAN sCALE1:200@A1


## EAST ELEVATIONS

SCALE 1:100 @ A1


EAST ELEVATION PROPOSED RESIDENCE 02


EAST ELEVATION proposed Residence 03


EAST ELEVATION pROPOSED RESIDENCE 06


EAST ELEVATION PROPOSED RESIDENCE 01

## WEST ELEVATIONS

SCALE 1:100 @ A1


WEST ELEVATION PROPOSED RESIDENCE 04


WEST ELEVATION proposed residence 05


WEST ELEVATION PROPOSED RESIDENCE 06


WEST ELEVATION proposed residence 01


## NORTH ELEVATIONS

SCALE 1:100@A1



NORTH ELEVATION proposed residence 03, $04 \& 05$


NORTH ELEVATION proposed residence 06


NORTH ELEVATION proposed Residence 02


NORTH ELEVATION PROPOSED RESIDENCE 01

## SOUTH ELEVATIONS



SOUTH ELEVATION PROPOSED RESIDENCE01 \& 02


SOUTH ELEVATION PROPOSED RESIDENCE 06


SOUTH ELEVATION PROPOSED RESIDENCE 05, 04 \& 03









RESIDENCE 01

KEY PLAN


RESIDENCE 03
Sc1:100


MAIN ELEVATION


Chadwick Grimmond Pty Ltd
ACN 633222830
Telephone 0359734257
Email cgce@cgce.com.au www.cgce.com.au

Structural and Civil Design

- Residential
- Commercial
- Industrial
- Institutional

Project Management
Building Inspections
'No Problems, Only Solutions'

## 29 October 2020

Thomas Anderson Design
1/415 McClelland Dr
Langwarrin VIC 3910

## Response to Clauses 53.18 and 55.03-4 of Planning and Environment Act 1987

for the development @ 48 James St, Lang Lang

Thomas Anderson Design commissioned Chadwick Grimmond Consulting Engineers (CGCE) to respond to "Further information request letter" by Cardinia Shire council regarding application "T200589" in particular item 3:
"3. A response to Clause 53.18 Stormwater Management and Clause 53.03-4"

## Clause 55.03-4 - Permeability and stormwater management objectives:

- To reduce the impact of increased stormwater run-off on the drainage system
- To facilitate on-site stormwater infiltration
- To encourage stormwater management that maximises the retention and reuse of stormwater

Given the design response, existing site conditions and residential nature of the development, additional stormwater runoff will be minimised. A drainage retention system will be proposed to further reduce the impact.

Site statistics:

- Total hard cover ratio: 56.1\%
- Garden area ratio: 42.4\%

The total impermeable coverage of the site is approximately $56.1 \%$, well below the $80 \%$ limit, leaving enough space for garden area and increasing the run-off absorption.

## Clause 53.18 - Stormwater management in Urban Development:

- To ensure that stormwater in urban development, including retention and reuse, is managed to mitigate the impacts of stormwater on the environment, property, and public safety
- To provide cooling, local habitat and amenity benefits

1. Any relevant water and stormwater management objective, policy or statement set out in this planning scheme

- Best Practice Environmental Management Guidelines (Victorian stormwater committee, 1999)
- Integrated water management framework - considering the whole water cycle at the time of planning

Adopting an integrated water management approach along with best practices outlined in the guideline will maximise environmental benefits improving local habitat and contributing to cooling as advised in the provision standards.
2. The capacity of the site to incorporate stormwater retention and reuse and other water sensitive urban design features

A stormwater retention system will be proposed and submitted to cater for a 1 in 10 year post-development storm event and limit the discharge to an equivalent pre-development 1 in 2 year storm event, or as directed in planning permit conditions.
Retention and reuse are to be included and managed in the system to minimise impacts of the stormwater on the environment and property and to provide cooling and community benefits.
3. Whether the development has utilised alternative water sources and/or incorporated water sensitive urban design

Rainwater tanks to be incorporated into water supply to be used for garden irrigation, toilet flushing, or similar purposes as shown on plans. Tanks to be discharged to the drainage system with an overflow pipe.

Innovative and Economical Solutions for your Project, Delivered on Time

## 'No Problems, Only Solutions'

4. Whether stormwater discharge from the site will adversely affect water quality entering the drainage system

Due to the residential nature of the development, water quality of the drainage system will not be adversely affected. No contamination would be entered into the system, and the retention design and screening used in the baffling system will minimise the impact of erosion and sedimentation.
Litter, concrete, and other construction wastes will be managed by the builder to maintain water quality during construction.
5. The capacity of the drainage network to accommodate additional stormwater

The development is located in an established residential area. Existing drainage network is available in the region. The existing junction pit in front of the subject site can be used as a point of discharge. Furthermore, using a retention system, incorporating water tanks for reuse, and significant permeable coverage will minimise the additional stormwater discharge into the network.
6. Whether the stormwater treatment areas can be effectively maintained

Stormwater drainage system and all its components including pipes, downpipes, roof gutters, water tanks etc. are always accessible for maintenance purposes.

## Amir Kazemian

Civil Engineer
CHADWICK GRIMMOND CONSULTING ENGINEERS
Date of issue 29 October 2020

## Welbourne STORM Rating Report

| TransactionID: | 1056035 |
| :--- | :--- |
| Municipality: | CARDINIA |
| Rainfall Station: | CARDINIA |
| Address: | 48 |
|  | James street |
|  | lang lang |
|  | VIC |
|  | Thomas Anderson Design and Consulting |
| Assessor: | Residential - Multiunit |
| Development Type: | $2,416.00$ |
| Allotment Site (m2): | 100 |
| STORM Rating \%: |  |


| Description | Impervious Area <br> $(\mathrm{m} 2)$ | Treatment Type | Treatment <br> Area/Volume <br> $(\mathrm{m2}$ or L) | Occupants / <br> Number Of <br> Bedrooms | Treatment \% | Tank Water <br> Supply <br> Reliability (\%) |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- |
| Residence 1 | 166.60 | Rainwater Tank | $3,000.00$ | 3 | 88.90 | 95.50 |
| Residence 2 | 166.40 | Rainwater Tank | $3,000.00$ | 3 | 88.90 | 95.50 |
| Residence 3 | 158.00 | Rainwater Tank | $2,500.00$ | 3 | 86.60 | 95.00 |
| Residence 4 | 158.00 | Rainwater Tank | $2,500.00$ | 3 | 86.60 | 95.00 |
| Residence 5 | 158.00 | Rainwater Tank | $2,500.00$ | 3 | 86.60 | 95.00 |
| Residence 6 | 162.80 | Rainwater Tank | $3,000.00$ | 3 | 89.50 | 97.00 |
| Driveway | 337.50 | Raingarden 300 mm | 9.00 | 0 | 133.00 | 0.00 |

[^0]
## David Bushell

## Arboricultural Report

## 48 James Street Lang Lang



## David Bushell <br> Arboricultural Consultancy

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$28^{\text {th }}$ of April 2020
Dennis Anderson
Thomas Anderson Design
415 McClelland Drive
Langwarrin
VIC 3910

Dear Dennis,,

## Arboricultural Report - 48 James Street Lang Lang Victoria

## Key Objectives

To inspect the site in question, namely 48 James Street Lang Lang Victoria

- To provide an overview of the existing trees in question, in regard to their health, structure, safety and suitability for retention under any re-development of the site.


## Methodology

A site inspection was carried out on Tuesday, $28^{\text {th }}$ of April. The existing trees in question were inspected and observations made of the surrounding area and vegetation. No samples of tree or site soil were taken. All observations are from the ground only; no aerial inspection has been performed. Trees inspected were located on the plan provided.

## Introduction

Demand for land and its development has never been greater. With changes in environmental planning and rezoning of land use, property sizes are diminishing. Trees and landscapes are not sacrosanct from sub-division; however trees and their preservation play a significant role in maintaining the quality of that environment.

The removal and replacement on development or construction sites should not always be considered a negative issue. Hichmough (1994) states "Retention for retention's sake is a pointless activity if there is not a high possibility that the tree(s) will not only survive but also will be viable in the long term". Quite often removal of vegetation can create opportunities for more beneficial long term modern integrated garden design.

The problem is often not that some trees are going to be removed on a development site but that the wrong trees are being saved.

When consideration is given to the retention of trees on a development site one must first ascertain if the trees are worth retaining, that is they are of particular significance to the site. Secondly, that after the construction there is enough space left available to not only sustain the tree but also see it continue to grow.

Careful consideration must be given to the requirements for sustained tree survival and growth and this balanced with the site usage and building requirements.

This report will be concerned with choosing those trees that can be retained in viable health and condition long term and that have measurable aesthetic and amenity value

## David Bushell <br> Arboricultural Consultancy

## Full Report Summary Table

| Tree No. | Common Name | Condition | Age | Health | Risk | Ret Value | Useful Life Expectancy |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 1 | Bottle Brush | Poor | Mature | Fair | Low | Low | $5>$ Years |
| 2 | Jacaranda | Good | Mature | Good | Medium | Medium | $20>$ Years |
| 3 | Kanooka | Fair | Semi Mature | Fair | Low | Medium | $20>$ Years |
| 4 | Silky Oak | Fair | Semi Mature | Fair | Medium | Medium | $20>$ Years |
| 5 | Camellia | Fair | Semi Mature | Fair | Low | Low | $10>$ Years |
| 6 | Silky Oak | Fair | Semi Mature | Fair | Medium | Medium | $20>$ Years |
| 7 | Eucalyptus | Fair | Mature | Fair | Medium | Medium | $20>$ Years |
| 8 | Wattle | Poor | Semi Mature | Poor | Low | Low | $5>$ Years |
| 9 | Bottle Brush | Poor | Semi Mature | Fair | Low | Low | $5>$ Years |
| 10 | Eucalyptus | Fair | Semi Mature | Fair | Low | Medium | $20>$ Years |
| 11 | Fruit Tree | Poor | Mature | Poor | Low | Low | $0>$ Years |
| 12 | Cup Gum | Fair | Semi Mature | Fair | Medium | Low | $5>$ Years |
| 14 | Aleppo Pine | Fair | Mature | Fair | Medium | Low | $0>$ Years |
| 15 | Paperbark | Poor | Semi Mature | Fair | Low | Low | $5>$ Years |
| 16 | Hakea | Poor | Semi Mature | Poor | Medium | Low | $0>$ Years |
| 17 | Paperbark | Poor | Mature | Fair | Low | Low | $10>$ Years |
|  | Mature | Fair | Medium | Low | $5>$ Years |  |  |

## David Bushell <br> Arboricultural Consultancy

| 18 | Spotted Gum | Fair | Semi Mature | Fair | Low | Medium | $20>$ Years |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 19 | Spotted Gum | Fair | Mature | Fair | Medium | Low | $10>$ Years |
| 20 | Eucalyptus | Poor | Semi Mature | Fair | Medium | Low | $10>$ Years |
| 21 | Ironbark | Poor | Semi Mature | Fair | Medium | Low | $10>$ Years |
| 22 | Regrowth | Poor | Semi Mature | Poor | Low | Low | $0>$ Years |
| 23 | Ironbark | Fair | Semi Mature | Fair | Medium | Low | $10>$ Years |
| 24 | White Gum | Poor | Semi Mature | Fair | Medium | Low | 10 > Years |
| 25 | White Gum | Fair | Semi Mature | Fair | Medium | Low | 10 > Years |
| 26 | Bracelet Honey Myrtle | Poor | Mature | Poor | Low | Low | $0>$ Years |
| 27 | Bottle Brush | Poor | Mature | Poor | Low | Low | $0>$ Years |
| 28 | Fig | Poor | Semi Mature | Fair | Low | Low | $0>$ Years |
| 29 | Red Flowering Gum | Poor | Semi Mature | Fair | Low | Low | $5>$ Years |
| 30 | Paperbark | Fair | Mature | Fair | Medium | Medium | $10>$ Years |
| 31 | Lemon Tree | Fair | Mature | Fair | Low | Low | $5>$ Years |

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| Tree No. | Common Name | Condition | Age | Health | Risk | Ret Value | Useful Life Expectancy |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 1 | Bottle Brush | Poor | Mature | Fair | Low | Low | $5>$ Years |
| 5 | Camellia | Fair | Semi Mature | Fair | Low | Low | $10>$ Years |
| 8 | Wattle | Poor | Semi Mature | Poor | Low | Low | $5>$ Years |
| 9 | Bottle Brush | Poor | Semi Mature | Fair | Low | Low | $5>$ Years |
| 11 | Fruit Tree | Poor | Mature | Poor | Low | Low | $0>$ Years |
| 12 | Cup Gum | Fair | Semi Mature | Fair | Medium | Low | $5>$ Years |
| 13 | Aleppo Pine | Fair | Mature | Fair | Medium | Low | $0>$ Years |
| 14 | Paperbark | Poor | Semi Mature | Fair | Low | Low | $5>$ Years |
| 15 | Eucalyptus | Poor | Semi Mature | Poor | Medium | Low | $0>$ Years |
| 16 | Hakea | Fair | Mature | Fair | Low | Low | 10 > Years |
| 17 | Paperbark | Poor | Mature | Fair | Medium | Low | $5>$ Years |
| 19 | Spotted Gum | Fair | Mature | Fair | Medium | Low | $10>$ Years |
| 20 | Eucalyptus | Poor | Semi Mature | Fair | Medium | Low | $10>$ Years |
| 21 | Ironbark | Poor | Semi Mature | Fair | Medium | Low | $10>$ Years |
| 22 | Regrowth | Poor | Semi Mature | Poor | Low | Low | $0>$ Years |
| 23 | Ironbark | Fair | Semi Mature | Fair | Medium | Low | $10>$ Years |
| 24 | White Gum | Poor | Semi Mature | Fair | Medium | Low | $10>$ Years |
| 25 | White Gum | Fair | Semi Mature | Fair | Medium | Low | $10>$ Years |

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| 26 | Bracelet Honey <br> Myrtle | Poor | Mature | Poor | Low | Low | $0>$ Years |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 27 | Bottle Brush | Poor | Mature | Poor | Low | Low | $0>$ Years |
| 28 | Fig | Poor | Semi Mature | Fair | Low | Low | $0>$ Years |
| 29 | Reo Flowering Gum | Poor | Semi Mature | Fair | Low | Low | $5>$ Years |
| 31 | Lemon Tree | Fair | Mature | Fair | Low | Low | $5>$ Years |

Trees with Medium Retention Value

| Tree No. | Common Name | Condition | Age | Health | Risk | Ret Value | Useful Life Expectancy |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 2 | Jacaranda | Good | Mature | Good | Medium | Medium | $20>$ Years |
| 3 | Kanooka | Fair | Semi Mature | Fair | Low | Medium | $20>$ Years |
| 4 | Silky Oak | Fair | Semi Mature | Fair | Medium | Medium | $20>$ Years |
| 6 | Silky Oak | Fair | Semi Mature | Fair | Medium | Medium | $20>$ Years |
| 7 | Eucalyptus | Fair | Mature | Fair | Medium | Medium | $20>$ Years |
| 10 | Eucalyptus | Fair | Semi Mature | Fair | Low | Medium | $20>$ Years |
| 18 | Spotted Gum | Fair | Semi Mature | Fair | Low | Medium | $20>$ Years |
| 30 | Paperbark | Fair | Mature | Fair | Medium | Medium | $10>$ Years |

Trees with High Retention Value
No trees with high retention value


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## David Bushell

| Tree No. | 1 |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Botanical Name | Callistemon viminalis |  |  |  |  |
| Common Name | Bottle Brush |  |  |  |  |
| Age | Mature |  |  |  |  |
| Health | Fair |  |  |  |  |
| Structure | Poor |  |  |  |  |
| Risk Rating | Low |  |  |  |  |
| Retention Value | Low |  |  |  |  |
| Useful Life Expectancy | $5>$ Years |  |  |  |  |
| DBH | 200m |  |  |  |  |
| Height \& Width | $4 \mathrm{~m} \times 4 \mathrm{~m}$ | TPZ | 2.4 m | SRZ | 1.6 m |
| Comments | Mature example of a Bottle Brush in an overall poor structural condition exhibiting poor low trunk structure not considered significant amenity value. |  |  |  |  |
| Recommendations | Due to the trees overall poor structural condition removal is considered reasonable in order to facilitate the proposed redevelopment of the site provided adequate compensatory replanting takes place. |  |  |  |  |
| Tree in Question Showing Low Trunk Structure |  |  |  |  |  |

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| Tree No. | 8 |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Botanical Name | Acacia baileyana |  |  |  |  |
| Common Name | Cootamundra Wattle |  |  |  |  |
| Age | Semi Mature |  |  |  |  |
| Health | Poor |  |  |  |  |
| Structure | Poor |  |  |  |  |
| Risk Rating | Low |  |  |  |  |
| Retention Value | Low |  |  |  |  |
| Useful Life Expectancy | $5>$ Years |  |  |  |  |
| DBH | 300 m |  |  |  |  |
| Height \& Width | $6 \mathrm{~m} \times 6 \mathrm{~m}$ | TPZ | 3.6 m | SRZ | 2.0 m |
| Comments | Semi mature example of Cootamundra Wattle in an overall poor condition not considered significant amenity value. Exhibiting Poor low trunk union. 0.5 m from fence |  |  |  |  |
| Recommendations | Removal is considered reasonable in order to facilitate the proposed redevelopment of the site provided adequate compensatory replanting takes place. |  |  |  |  |
|  |  |  |  |  |  |

## David Bushell



## David Bushell

| Tree No. | 10 |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Botanical Name | Eucalyptus species |  |  |  |  |
| Common Name | Eucalyptus |  |  |  |  |
| Age | Semi Mature |  |  |  |  |
| Health | Fair |  |  |  |  |
| Structure | Fair |  |  |  |  |
| Risk Rating | Low |  |  |  |  |
| Retention Value | Medium |  |  |  |  |
| Useful Life Expectancy | 20 > Years |  |  |  |  |
| DBH | 200 mm |  |  |  |  |
| Height \& Width | $8 \mathrm{~m} \times 6 \mathrm{~m}$ | TPZ | 2.4 m | SRZ | 1.6 m |
| Comments | Semi mature example of a Eucalyptus Species in an overall fair condition. 4.0 m from fence |  |  |  |  |
| Recommendations | Removal is considered reasonable in order to facilitate the proposed redevelopment of the site provided adequate compensatory replanting takes place. |  |  |  |  |
|  |  | in Qu | wing |  |  |

## David Bushell

| Tree No. | 11 |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Botanical Name | Fruit Tree Species |  |  |  |  |
| Common Name | Fruit Tree |  |  |  |  |
| Age | Mature |  |  |  |  |
| Health | Poor |  |  |  |  |
| Structure | Poor |  |  |  |  |
| Risk Rating | Low |  |  |  |  |
| Retention Value | Low |  |  |  |  |
| Useful Life Expectancy | $0>$ Years |  |  |  |  |
| DBH | 150 mm |  |  |  |  |
| Height \& Width | $3 \mathrm{~m} \times 3 \mathrm{~m}$ | TPZ | 1.8m | SRZ | 1.5 m |
| Comments | Mature fruit tree in an overall poor condition not considered significant amenity value. 3.5 m from fence |  |  |  |  |
| Recommendations | Due to the trees overall poor condition exhibiting poor low trunk union removal is considered reasonable in order to facilitate the proposed redevelopment of the site provided adequate compensatory replanting takes place. |  |  |  |  |
| Tree in Question Showing Poor Trunk Union |  |  |  |  |  |

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| Tree No. | 12 |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Botanical Name | Eucalyptus species |  |  |  |  |
| Common Name | Eucalyptus Species |  |  |  |  |
| Age | Semi Mature |  |  |  |  |
| Health | Fair |  |  |  |  |
| Structure | Poor |  |  |  |  |
| Risk Rating | Medium |  |  |  |  |
| Retention Value | Low |  |  |  |  |
| Useful Life Expectancy | $5>$ Years |  |  |  |  |
| DBH | 300 mm |  |  |  |  |
| Height \& Width | $6 \mathrm{~m} \times 6 \mathrm{~m}$ | TPZ | 3.6 m | SRZ | 2.0 m |
| Comments | Semi mature example of a Eucalyptus Species in an overall poor structural condition angled growing condition due to available light not considered significant amenity value. 3.0 m from fence. |  |  |  |  |
| Recommendations | Due to the trees poor structural condition removal is considered reasonable in order to facilitate the proposed redevelopment of the site provided adequate compensatory replanting takes place. |  |  |  |  |
| Tree in Question Showing Angled Condition |  |  |  |  |  |

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| Tree No. | 13 |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Botanical Name | Pinus halepensis |  |  |  |  |
| Common Name | Aleppo Pine |  |  |  |  |
| Age | Mature |  |  |  |  |
| Health | Fair |  |  |  |  |
| Structure | Poor |  |  |  |  |
| Risk Rating | Medium |  |  |  |  |
| Retention Value | Low |  |  |  |  |
| Useful Life Expectancy | $0>$ Years |  |  |  |  |
| DBH | 800mm |  |  |  |  |
| Height \& Width | $10 \mathrm{~m} \times 6 \mathrm{~m}$ | TPZ | 9.6 m | SRZ | 3.0m |
| Comments | Mature example of an Aleppo Pine in an overall poor structural condition exhibiting major low trunk co dominance not considered significant amenity value. 1.0 from fence |  |  |  |  |
| Recommendations | Due to the trees poor structural condition removal is considered reasonable in order to facilitate the proposed redevelopment of the site provided adequate compensatory replanting takes place. |  |  |  |  |
| Tree in Question Showing Low Trunk Condition |  |  |  |  |  |

## David Bushell

| Tree No. | 14 |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Botanical Name | Melaleuca styphelioides |  |  |  |  |
| Common Name | Prickly Paperbark |  |  |  |  |
| Age | Semi Mature |  |  |  |  |
| Health | Fair |  |  |  |  |
| Structure | Poor |  |  |  |  |
| Risk Rating | Low |  |  |  |  |
| Retention Value | Low |  |  |  |  |
| Useful Life Expectancy | $5>$ Years |  |  |  |  |
| DBH | 200 mm |  |  |  |  |
| Height \& Width | $8 \mathrm{~m} \times 4 \mathrm{~m}$ | TPZ | 2.4 m | SRZ | 1.6 m |
| Comments | Multi stemmed (regrowth from cut stump) Paperbark in a poor structural condition not considered significant amenity value. 4.0 m from fence. |  |  |  |  |
| Recommendations | Due to the trees overall poor structural condition removal is considered reasonable in order to facilitate the proposed redevelopment of the site provided adequate compensatory replanting takes place. |  |  |  |  |
|  | Tree in Question Showing Poor Low Trunk Structure |  |  |  |  |

## David Bushell

| Tree No. | 15 |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Botanical Name | Eucalyptus globulus |  |  |  |  |
| Common Name | Bluegum |  |  |  |  |
| Age | Semi Mature |  |  |  |  |
| Health | Poor |  |  |  |  |
| Structure | Poor |  |  |  |  |
| Risk Rating | Medium |  |  |  |  |
| Retention Value | Low |  |  |  |  |
| Useful Life Expectancy | $0>$ Years |  |  |  |  |
| DBH | 200 mm |  |  |  |  |
| Height \& Width | $8 \mathrm{~m} \times 4 \mathrm{~m}$ | TPZ | 2.4 m | SRZ | 1.6 m |
| Comments | Semi mature example of a Bluegum in an overall poor condition exhibiting low trunk decay not considered significant amenity value. 3.0 m from fence |  |  |  |  |
| Recommendations | Due to the trees overall poor condition removal is considered reasonable in order to facilitate the proposed redevelopment of the site provided adequate compensatory replanting takes place. |  |  |  |  |
|  | Tree in Question Showing Low Trunk Decay |  |  |  |  |

## David Bushell

| Tree No. | 16 |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Botanical Name | Hakea laurina |  |  |  |  |
| Common Name | Pinchusion Hakea |  |  |  |  |
| Age | Mature |  |  |  |  |
| Health | Fair |  |  |  |  |
| Structure | Fair |  |  |  |  |
| Risk Rating | Low |  |  |  |  |
| Retention Value | Low |  |  |  |  |
| Useful Life Expectancy | 10 > Years |  |  |  |  |
| DBH | 100 mm |  |  |  |  |
| Height \& Width | $4 \mathrm{~m} \times 4 \mathrm{~m}$ | TPZ | 1.2 m | SRZ | 1.5 m |
| Comments | Mature example of a Hakea in an overall fair condition not considered significant amenity value. 1.0 m from fence. |  |  |  |  |
| Recommendations | Removal is considered reasonable in order to facilitate the proposed redevelopment of the site provided adequate compensatory replanting takes place. |  |  |  |  |
|  | Tree in Question Showing Location |  |  |  |  |

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| Tree No. | 17 |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Botanical Name | Melaleuca styphelioides |  |  |  |  |
| Common Name | Prickly Paperbark |  |  |  |  |
| Age | Mature |  |  |  |  |
| Health | Fair |  |  |  |  |
| Structure | Poor |  |  |  |  |
| Risk Rating | Medium |  |  |  |  |
| Retention Value | Low |  |  |  |  |
| Useful Life Expectancy | $5>$ Years |  |  |  |  |
| DBH | 800mm |  |  |  |  |
| Height \& Width | $6 \mathrm{~m} \times 6 \mathrm{~m}$ | TPZ | 9.6m | SRZ | 3.0m |
| Comments | Mature example of a Prickly Paperbark in a poor structural condition not considered significant amenity value. 5.0 m from fence |  |  |  |  |
| Recommendations | Due to the trees poor structural condition removal is considered reasonable in order to facilitate the proposed redevelopment of the site provided adequate compensatory replanting takes place. |  |  |  |  |
| Tree in Question Showing Poor Low Trunk Structure |  |  |  |  |  |

## David Bushell

| Tree No. | 18 |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Botanical Name | Corymbia maculata |  |  |  |  |
| Common Name | Spotted Gum |  |  |  |  |
| Age | Semi Mature |  |  |  |  |
| Health | Fair |  |  |  |  |
| Structure | Fair |  |  |  |  |
| Risk Rating | Low |  |  |  |  |
| Retention Value | Medium |  |  |  |  |
| Useful Life Expectancy | $20>$ Years |  |  |  |  |
| DBH | 250mm |  |  |  |  |
| Height \& Width | $10 \mathrm{~m} \times 4 \mathrm{~m}$ | TPZ | 3 m | SRZ | 1.5 m |
| Comments | Semis mature Spotted Gum in an overall good condition suitable for retention as part of the proposed redevelopment of the site. 1.5 m from fence. |  |  |  |  |
| Recommendations | Full tree protection measures as set out in AS 4970-2009 Protection of Trees on Development Sites required. |  |  |  |  |
|  |  |  |  |  |  |

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| Tree No. | 19 |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Botanical Name | Corymbia maculata |  |  |  |  |
| Common Name | Spotted Gum |  |  |  |  |
| Age | Mature |  |  |  |  |
| Health | Fair |  |  |  |  |
| Structure | Poor |  |  |  |  |
| Risk Rating | Medium |  |  |  |  |
| Retention Value | Low |  |  |  |  |
| Useful Life Expectancy | $10>$ Years |  |  |  |  |
| DBH | 600 mm |  |  |  |  |
| Height \& Width | $12 \mathrm{~m} \times 8 \mathrm{~m}$ | TPZ | 7.2 m | SRZ | 2.6 m |
| Comments | Mature example of Spotted Gum in an overall poor structural condition exhibiting major co dominant low trunk union. 3.5 m from fence. |  |  |  |  |
| Recommendations | Due to the trees major low trunk co dominance removal is considered reasonable in order to facilitate the proposed redevelopment of the site provided adequate compensatory replanting takes place. |  |  |  |  |
|  | Tree in Question Showing Major Low Trunk Co dominance |  |  |  |  |

## David Bushell

| Tree No. | 20 |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Botanical Name | Eucalyptus species |  |  |  |  |
| Common Name | Eucalyptus Species |  |  |  |  |
| Age | Semi Mature |  |  |  |  |
| Health | Fair |  |  |  |  |
| Structure | Poor |  |  |  |  |
| Risk Rating | Medium |  |  |  |  |
| Retention Value | Low |  |  |  |  |
| Useful Life Expectancy | $10>$ Years |  |  |  |  |
| DBH | 400 mm |  |  |  |  |
| Height \& Width | $6 \mathrm{~m} \times 8 \mathrm{~m}$ | TPZ | 4.8m | SRZ | 2.2m |
| Comments | Semi mature example of a Eucalyptus Species in an overall poor condition. On fence line. |  |  |  |  |
| Recommendations | Due to the trees poor condition removal is considered reasonable in order to facilitate the proposed redevelopment of the site provided adequate compensatory replanting takes place. |  |  |  |  |
|  | Tree in Question Showing Location |  |  |  |  |

## David Bushell

| Tree No. | 21 |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Botanical Name | Eucalyptus sideroxylon |  |  |  |  |
| Common Name | Ironbark |  |  |  |  |
| Age | Semi Mature |  |  |  |  |
| Health | Fair |  |  |  |  |
| Structure | Poor |  |  |  |  |
| Risk Rating | Medium |  |  |  |  |
| Retention Value | Low |  |  |  |  |
| Useful Life Expectancy | 10 > Years |  |  |  |  |
| DBH | 200 mm |  |  |  |  |
| Height \& Width | $6 \mathrm{~m} \times 4 \mathrm{~m}$ | TPZ | 2.4 m | SRZ | 1.6 m |
| Comments | Semi mature example of an Ironbark in a poor structural condition exhibiting decayed low trunk not considered significant amenity value. 1.0 m from fence. |  |  |  |  |
| Recommendations | Due to the trees poor structural condition removal is considered reasonable in order to facilitate the proposed redevelopment of the site provided adequate compensatory replanting takes place. |  |  |  |  |
|  | Tree in Question Showing Decayed Low Truk |  |  |  |  |

## David Bushell

| Tree No. | 22 |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Botanical Name | Eucalyptus regrowth |  |  |  |  |
| Common Name | Eucalyptus Regrowth |  |  |  |  |
| Age | Semi Mature |  |  |  |  |
| Health | Poor |  |  |  |  |
| Structure | Poor |  |  |  |  |
| Risk Rating | Low |  |  |  |  |
| Retention Value | Low |  |  |  |  |
| Useful Life Expectancy | $0>$ Years |  |  |  |  |
| DBH | 200 mm |  |  |  |  |
| Height \& Width | $4 \mathrm{~m} \times 4 \mathrm{~m}$ | TPZ | 2.4m | SRZ | 1.6m |
| Comments | Regrowth from cut stump in poor structural condition not considered significant amenity value. 1.5 m from fence. |  |  |  |  |
| Recommendations | Due to the plants regrowth from cut stump removal is considered reasonable in order to facilitate the proposed redevelopment of the site provided adequate compensatory replanting takes place. |  |  |  |  |
|  |  | estio | Reg | $\backslash$ |  |

## David Bushell

| Tree No. | 23 |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Botanical Name | Eucalyptus scoparia |  |  |  |  |
| Common Name | Wallangarra White Gum |  |  |  |  |
| Age | Semi Mature |  |  |  |  |
| Health | Fair |  |  |  |  |
| Structure | Poor |  |  |  |  |
| Risk Rating | Medium |  |  |  |  |
| Retention Value | Low |  |  |  |  |
| Useful Life Expectancy | 10 > Years |  |  |  |  |
| DBH | 300 mm |  |  |  |  |
| Height \& Width | $8 \mathrm{~m} \times 8 \mathrm{~m}$ | TPZ | 3.6 m | SRZ | 2.0 m |
| Comments | Semi mature example of a White Gum in a poor structural condition exhibiting decayed low trunk union not considered significant amenity value. 3.0 m from fence |  |  |  |  |
| Recommendations | Due to the trees poor structural condition removal is considered reasonable in order to facilitate the proposed redevelopment of the site provided adequate compensatory replanting takes place. |  |  |  |  |
|  |  |  |  |  |  |

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| Tree No. | 24 |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Botanical Name | Eucalyptus scoparia |  |  |  |  |
| Common Name | Wallangarra White Gum |  |  |  |  |
| Age | Semi Mature |  |  |  |  |
| Health | Fair |  |  |  |  |
| Structure | Poor |  |  |  |  |
| Risk Rating | Medium |  |  |  |  |
| Retention Value | Low |  |  |  |  |
| Useful Life Expectancy | $10>$ Years |  |  |  |  |
| DBH | 400 mm |  |  |  |  |
| Height \& Width | $8 \mathrm{~m} \times 8 \mathrm{~m}$ | TPZ | 4.8 m | SRZ | 2.2 m |
| Comments | Semi mature example of a Wallangarra White Gum exhibiting low trunk decay not considered significant amenity value. 1.0 m from fence. |  |  |  |  |
| Recommendations | Due to the low trunk decay removal is considered reasonable in order to facilitate the proposed redevelopment of the site provided adequate compensatory replanting takes place. |  |  |  |  |
|  |  |  |  |  |  |

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| Tree No. | 26 |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Botanical Name | Melaleuca armillaris |  |  |  |  |
| Common Name | Bracelet Honey Myrtle |  |  |  |  |
| Age | Mature |  |  |  |  |
| Health | Poor |  |  |  |  |
| Structure | Poor |  |  |  |  |
| Risk Rating | Low |  |  |  |  |
| Retention Value | Low |  |  |  |  |
| Useful Life Expectancy | $0>$ Years |  |  |  |  |
| DBH | 200 mm |  |  |  |  |
| Height \& Width | $4 \mathrm{~m} \times 4 \mathrm{~m}$ | TPZ | 2.4 m | SRZ | 1.6 m |
| Comments | Mature example of a Bracelet Honey Myrtle in an overall poor condition exhibiting decayed low trunk not considered significant amenity value. Poor low trunk union. 1.0m from fence. |  |  |  |  |
| Recommendations | Due to the trees overall poor condition removal is considered reasonable in order to facilitate the proposed redevelopment of the site provided adequate compensatory replanting takes place. |  |  |  |  |
|  |  |  |  |  |  |

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| Tree No. | 27 |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Botanical Name | Callistemon viminalis |  |  |  |  |
| Common Name | Bottle Brush |  |  |  |  |
| Age | Mature |  |  |  |  |
| Health | Poor |  |  |  |  |
| Structure | Poor |  |  |  |  |
| Risk Rating | Low |  |  |  |  |
| Retention Value | Low |  |  |  |  |
| Useful Life Expectancy | $0>$ Years |  |  |  |  |
| DBH | 100 mm |  |  |  |  |
| Height \& Width | $2 \mathrm{~m} \times 2 \mathrm{~m}$ | TPZ | 1.2 m | SRZ | 1.5 m |
| Comments | Mature example of a Bottle Brush in an overall poor condition not considered significant amenity value. 6.0 m from fence. |  |  |  |  |
| Recommendations | Due to the trees overall poor condition removal is considered reasonable in order to facilitate the proposed redevelopment of the site provided adequate compensatory replanting takes place. |  |  |  |  |
|  |  |  |  |  |  |

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| Tree No. | 28 |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Botanical Name | Ficus carica |  |  |  |  |
| Common Name | Common Fig |  |  |  |  |
| Age | Semi Mature |  |  |  |  |
| Health | Fair |  |  |  |  |
| Structure | Poor |  |  |  |  |
| Risk Rating | Low |  |  |  |  |
| Retention Value | Low |  |  |  |  |
| Useful Life Expectancy | $0>$ Years |  |  |  |  |
| DBH | 150 mm |  |  |  |  |
| Height \& Width | $4 \mathrm{~m} \times 4 \mathrm{~m}$ | TPZ | 1.8 m | SRZ | 1.5m |
| Comments | Semi mature example of a Common Fig exhibiting a poor structural condition not considered significant amenity value. 4.0 m from fence. |  |  |  |  |
| Recommendations | Due to the trees poor structural condition removal is considered reasonable in order to facilitate the proposed redevelopment of the site provided adequate compensatory replanting takes place. |  |  |  |  |
|  |  |  |  |  |  |

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| Tree No. | 29 |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Botanical Name | Corymbia ficifolia |  |  |  |  |
| Common Name | Red Flowering Gum |  |  |  |  |
| Age | Semi Mature |  |  |  |  |
| Health | Fair |  |  |  |  |
| Structure | Poor |  |  |  |  |
| Risk Rating | Low |  |  |  |  |
| Retention Value | Low |  |  |  |  |
| Useful Life Expectancy | $5>$ Years |  |  |  |  |
| DBH | 200 mm |  |  |  |  |
| Height \& Width | $6 \mathrm{~m} \times 4 \mathrm{~m}$ | TPZ | 2.4 m | SRZ | 1.6 m |
| Comments | Semi mature example of a Red Flowering Gum in an overall poor condition not considered significant amenity value. Poor low trunk union. 8.0 m from fence. |  |  |  |  |
| Recommendations | Due to the trees overall poor structure removal is considered reasonable in order to facilitate the proposed redevelopment of the site provided adequate compensatory replanting takes place. |  |  |  |  |
|  | Tr | stion | Overall | e |  |

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| Tree No. | 31 |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Botanical Name | Citrus limon |  |  |  |  |  |
| Common Name | Lemon Tree |  |  |  |  |  |
| Age | Mature |  |  |  |  |  |
| Health | Fair |  |  |  |  |  |
| Structure | Fair |  |  |  |  |  |
| Risk Rating | Low |  |  |  |  |  |
| Retention Value | Low |  |  |  |  |  |
| Useful Life Expectancy | $5>$ Years |  |  |  |  |  |
| DBH | 100 mm |  |  |  |  |  |
| Height \& Width |  |  |  |  |  | $2 \mathrm{~m} \times 4 \mathrm{~m}$ TPZ 1.2 m SRZ 1.5 m |
| Comments | Semi mature example of a Lemon Tree of modest size not considered significant amenity value. Poor low trunk union. 0.5 m from fence |  |  |  |  |  |
| Recommendations | Due to the trees modest size removal is considered reasonable in order to facilitate the proposed redevelopment of the site provided adequate compensatory replanting takes place. |  |  |  |  |  |
| Tree in Question Showing Modest Size |  |  |  |  |  |  |

## David Bushell

## Arboricultural Impact Statement

Guidelines for determining the extent to which the proposed construction design can potentially impact site vegetation are taken from AS 4970-2009 Protection of Trees on Development Sites.

Provided in the individual tree assessment report are the required DBH measurements used to calculate the TPZ and SRZ requirements.

As the majority of the trees located within the proposed development site are in general poor and dilapidated conditions resulting in a low retention value and are a constraint on the design they should not be considered for retention. On this basis they have not been included in this Arboricultural impact statement.

Trees $2,3,4,6,7,10,18,30$ have a medium retention value. The proposed design is sensitive to the tree needs and does not encroach into the TPZ of these trees.

## David Bushell

## Tree Protection Management Plan

As stated in the Arboricultural Impact Statement only trees 2, 3,4,6,7,10, 18,30 require protection measures as set out in AS 4970-2009 Protection of Trees on Development Sites. To provide this, open space at the rear of the dwelling provides sufficient space to allow tree root activity. No additional pruning of the trees is required.

Tree protection fencing for each individual tree on the development site as set out in AS4970-2009 Protection of Trees on Development Sites is required. In addition similar fencing on the tree root sections that extend from the adjacent property is also required trees $3,4,6$,

This fence shall be constructed following the demolition of the existing dwellings on the site and prior to the commencement of any construction works.

It is important that no construction equipment or the stockpiling of material is to take place in the TPZ fenced of area AS 4970-2009 provides full details and is to be studied prior to works commencing. Additional mulching over the root systems is advised to provide additional protection.

On the completion of all construction works and prior the landscaping component commencing the Tree Protection Fence can be removed. This area can receive gentle de-compaction works to allow the infiltration of water and nutrients as part of the general landscaping works program process.

Regular inspections throughout the demolition, construction and landscaping process shall take place. This is to be by a suitably qualified person to monitor the effectiveness of the Tree Protection Management Plan and make any adjustments as required.

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## Assumptions and Limiting Conditions

1 Any legal description provided to the consultant is assumed to be correct. Any titles and ownerships to any property are assumed to be good. No responsibility is assumed for matters legal in character.

2 It is assumed that any property/project is not in violation of any applicable codes, ordinances, statutes or other government regulations.

3 Care has been taken to obtain all information form reliable sources. All data has been verified in so far as possible; however the consultant can neither guarantee nor be responsible for the accuracy of the information provided by others.

4 The consultant shall not be required to give testimony or to attend court by reason of this report unless subsequent contractual arrangements are made, including payment of an additional fee for such services.

5 Loss or alteration of any part of this report invalidates the entire report.
6 Possession of this report or a copy thereof does not imply right of publication or use for any purpose by anyone but the person to whom it is addressed, without the prior written consent of the consultant.

7 Neither all nor any part of the contents of this report, nor any copy thereof, shall be used for any purpose by anyone but the person to whom it is addressed, without the written consent of the consultant, nor shall it be conveyed by anyone, including the client, to the public through advertising, public relations, news, sales, or other media, without the written consent of the consultant.

8 This report and any values expressed herein represent the opinion of the consultant and the consultant's fee is in no way contingent upon the reporting of a specified value, a stipulated result, the occurrence of a subsequent event, nor upon any findings to be reported.

9 Sketches, diagrams, graphs and photographs in this report, being intended as visual aids, are not necessarily to scale and should not be construed as engineering or architectural reports or surveys.

10 Unless expressed otherwise:

1) Information contained in this report covers only those items that were examined and reflect the condition of those items at the time of inspection; and
2) The inspection is limited to visual examination of accessible components without dissection, excavation or probing. There is no warranty or guarantee, expressed or implied, that the problems or deficiencies of the plants or property in question may not arise in the future.

## Glossary of Arboricultural Terms

A brief description of the arboricultural terms highlighted in the report is outlined below.

| Attachment | The way in which branches are attached to the trunk, taking into account the way wood <br> is formed and laid around the limb union. |
| :--- | :--- |
| Bark | A protective covering over branches, stems (and some roots) that arises from the cork <br> cambium. |
| Bifurcation | The attachment formed at the union of co-dominant stems, branches or limbs that <br> emerge at an acute angle. The branch bark ridge is compacted inwards as the stem <br> growth expands creating a growth fault or weakness. |
| Buttress Roots | The roots at the base of the trunk; trunk basal flare. |
| Canker | A localised diseased area, often shrunken and discoloured, on stems, branches and <br> trunks. Caused by fungi or bacteria. |
| Canopy (Crown) | The total portion of the tree consisting of the limb, branches and the leaves. |
| Cavity | An open wound characterised by the presence of decay. |
| Chlorosis | Whitish or yellowish discolouration due to the lack of chlorophyll. |
| Co-dominant <br> (Multi-stemming) | Acutely forked branches, stems or trunks of the same diameter size. |
| Crown Thinning | The removal of selected branches to increase light penetration and air movement <br> through the tree crown. This practice stimulates interior foliage that improves branch <br> taper and strength. Thinning also reduces the wind sail effect of the crown and weight <br> on branches. Crown thinning also removes branches that are rubbing or crossing over <br> other branches. |
| Crown Reduction | The reduction of branches to reduce the height and spread of a tree. This practice <br> maintains the structural integrity of the tree and delays the time when the tree will <br> require pruning. Crown reduction should not drastically alter the natural form of the tree. |
| DBH | Diameter at Breast Height; the diameter of the trunk measured at 1.4 to 1.5 meters <br> above grade. |
| Included Bark | The dead branches that will be shed by the tree in future. These needs to be removed <br> so as to make the tree safer i.e. no falling debris, improves the appearance of the tree <br> and is a health practice, i.e. removal of food source for wood decay organisms. |
| Exudation | A condition where the ends of a tree's branches are dying. |
| Foliage | Shoots produced by dormant buds within the bark or stems of a tree in response to <br> stress or lopping. These usually have weak forms of attachment. |
| Foliar Health | The oozing out of sap or other cellular contents. |
| Birdling Roots | The leaves of a plant. <br> grow that is pushed inside a developing crotch, causing weakened structure. |
| This is determined by the shape, size and colour of the leaves compared to a normal |  |
| hearmic Growth | Thecimen. |


| Leader | The primary, terminal shoot(s) or trunk of a tree. |
| :---: | :---: |
| Lean | Departure of the trunk from the vertical. |
| Misshapen | Where the tree has poor shape and form when compared to a normal specimen of its species. |
| Over Extension | Accumulation of disproportionate mass at the end of branches. Departure of branch for main canopy. Usually scaffold branches (see below). |
| Pruning | Removal of unwanted parts of a tree. Always creates a wound. |
| Root Zone | The area around the base of the tree which encompasses all of the extension root growth and the feeding root system and provides the above ground portion of the tree with water and nutrients. |
| Scaffold Branches | The major structural support branches that attach to the trunk. |
| Shedding | The process of the tree dropping a limb due to natural processes other than during a storm. |
| Stress | A condition where a tree is in a condition less that optimal; or, an environmental factor that predisposes a tree to a condition less than optimal. |
| Stub | A small section of dead limb or branch which if left after pruning provides food and shelter for micro-organisms and insect that could spread into the tree. At no time should a stub be left. |
| Tree Protection Fence | The fences that delineate the Tree Protection Zone (see below) and which cannot be erected without permission of the arborist. |
| Tree Protection Zone | A zone around the tree (determined by an arborist) which requires protection from compaction, fill and root severance. |
| Uplifting | Removes designated lower branches to provide clearance for building, vehicles, pedestrians or vistas. |
| Vigour | A measure of the health of a tree indicated by its extension growth, foliage colour and ability to respond to wounds or stresses. Vigour is the ability to resist strain. Vigour is a genetic feature. |
| Vitality | The ability of a tree to grow under the condition the tree system finds itself. |
| Wound | The opening that is created any time the tree's protective bark covering is penetrated, cut or removed, injuring or otherwise damaging living tissue. |

## Tree Data Descriptors

Age

| Category | Description |
| :--- | :--- |
| Young | Juvenile tree and/or recently planted. Between one (1) and five (5) years. |
| Semi Mature | Tree is actively putting on extension growth. |
| Mature | Specimen has reached expected size in situation; no vigorous extension growth just re- <br> leafing only. |
| Senescent | Tree is over mature and in decline or mortality spiral. |

Health

| Category | Description |
| :--- | :--- |
| Good | Crown full, with good density, foliage entire with good colour, minimal or no pathogen <br> damage. Good growth indicators, eg. Extension growth. No or minimal canopy dieback. <br> Good wound wood development. |
| Fair | Tree is exhibiting one or more of the following symptoms; <br> Tree has < 30\% dead wood, or can have minor dieback. Foliage generally with good colour, <br> some discolouration may be present. Minor pathogen damage present. Typical growth <br> indicators, eg. Extension growth, leaf size, canopy density for species in location. |
| Poor | Tree has > 30\% dead wood. Canopy dieback present. Discoloured or distorted leaves, <br> and/or excessive epicormic growth. Pathogen is present and/or stress symptoms that could <br> lead or are leading to decline of tree. |
| Dead | Tree is dead. |

Structure

| Category | Description |
| :--- | :--- |
| Good | Good branch attachment and/or no or minor structural defects. Trunk and scaffold branches <br> sound or minor damage. Good trunk and scaffold branch taper. No branch or extension. No <br> damage to structural roots and/or good buttressing present. No obvious root pests or <br> diseases. |
| Fair | Some minor structural defects and/or minor damage to trunk. Bark missing. Cavities could <br> be present. Minimal or no damage to structural roots. Typical structure for species. |
| Poor | Major structural defects and/or trunk damage and /or missing bark, large cavities, and/or <br> girdling or damage roots that are problematic. |
| Hazardous | Trees pose immediate hazard potential that should be rectified as soon as possible. |

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## Risk Rating

| Category | Description |
| :--- | :--- |
| Critical | $1-3$ months |
| High | $3-6$ months |
| Medium | $12-18$ months |
| Low | $24-36$ months |

## References

Australian Standard Protection of Trees on Development Sites AS 4970-2009
Australian Standard Pruning of Amenity Trees AS 4373-2007


David Bushell
Advanced Certificate in Arboriculture
Diploma in Arboriculture
Certificate IV work place training and assessment


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