Planning Delegated Committee Meeting

Agenda

13 April 2022 at 6:30pm

Council Chamber, Town Hall, Sturt Street, Ballarat

CITY OF BALLARAT

PUBLIC SUBMISSIONS

- Due to COVID-19, the following has been put in place.
- Public representations may be made on any items listed on the agenda in a Planning Meeting apart from those listed in the confidential section.
- Members of the Public must be fully vaccinated to attend the meeting in person to make a submission on an agenda item.
- All attendees are encouraged to register their attendance by 4:30pm on the day of the meeting
- If you do wish to attend the meeting in person to make a submission, please contact governance@ballarat.vic.gov.au or call 5320 5875 to register
- Members of the public who wish to make a submission on an agenda item but who are unable to attend the meeting in person may make a submission in writing:
    - Submissions must be submitted in writing to governance@ballarat.vic.gov.au by no later than 4:30pm on the day of Planning meeting; and
    - limited to no more than 200 words that will be read out by the Chief Executive Officer or nominated delegate at the meeting prior to the matter being considered by Council.

ORDER OF BUSINESS:

1. ACKNOWLEDGEMENT OF COUNTRY

The City of Ballarat acknowledges the Traditional Custodians of the land we live and work on, the Wadawurrung and Dja Dja Wurrung People, and recognises their continuing connection to the land and waterways. We pay our respects to their Elders past, present and emerging and extend this to all Aboriginal and Torres Straight Islander People.

2. APOLOGIES FOR ABSENCE

3. DECLARATION OF CONFLICT OF INTERESTS

4. CONFIRMATION OF MINUTES

5. OFFICER BRIEFING

6. PLANNING DELEGATED COMMITTEE REPORTS

6.1. PLP/2021/566 - 17 PARK STREET WENDOUREE

Division: Development and Growth
Director: Natalie Robertson
Author/Position Peri Bowman – Senior Statutory Planner

PURPOSE

1. The purpose of this report is to determine a position on Planning Permit Application PLP/2021/566, 17 Park Street, Wendouree.

BACKGROUND

2. A summary of the application has been provided below:

RESPONSIBLE OFFICER	Peri Bowman
PERMIT NO.	PLP/2021/566
PROPERTY ADDRESS	17 Park Street, Wendouree
APPLICANT	Virtue Property Group
PROPOSAL	Construction of five (5) townhouses and reduction in car parking requirements
CURRENT USE	Single dwelling
SITA AREA	1012sqm
DATE RECEIVED	16 August 2021
DATE OF REPORT	13 April 2022
ZONE(S)	Residential Growth Zone – Schedule 1
OVERLAY(S)	N/A
PERMIT TRIGGERS	32.07-5 Construct two or more dwellings on a lot 52.06-3 Reduction in car parking requirements
TITLE PARTICULARS	Caveat: AU034360h 10/02/2021 Caveator: Kelly Kwan Grounds Of Claim: Agreement with the following parties and date. Parties: The Registered Proprietor(s) Date: 08/02/2021 Estate or Interest: Freehold Estate Prohibition: Absolutely Lodged By: Local Lawyers Notices To: Local Lawyers Of 23 Lobelia Drive Altona North Vic 3025

OBJECTORS	Seven (7) objections Petition signed by 67 parties
CHMP	N/A
CMA	Corangamite Catchment Management Authority
FLOOD PRONE	No
RECOMMENDATION	Notice of Decision

PROPOSAL

3. This application seeks approval to construct five (5) townhouse dwellings on the subject site. The existing dwelling will be demolished. The land is not proposed to be subdivided at this time.

4. The proposed townhouses will be two storeys and feature pitched roofs. The buildings will comprise a combination of grey brick veneer cladding and off-white Axon 400 cladding. The roofs will be finished in dark grey.

5. Dwelling 1 will have four bedrooms and two bathrooms with an open plan living, kitchen, dining area, a one-car garage and space for a tandem uncovered car space. This dwelling will be oriented to Park Street.

6. Dwelling 2 will feature a bedroom, bathroom, laundry and combined kitchen, living and dining space at ground floor alongside a single car garage. At first floor the dwelling will comprise two additional bedrooms, a living room, study, a second bathroom and a separate WC. Dwelling 2 will have 25sqm of north-oriented secluded private open space and an additional 15.2sqm of open space, equating to a total of 40.2sqm.

7. At ground floor level Dwelling 3 will feature a bedroom, bathroom, laundry and combined kitchen, living and dining space. This dwelling will also have a single car garage at ground floor level and an additional uncovered tandem car parking space. At first floor level, dwelling 3 will comprise two additional bedrooms, a living room, study, a second bathroom and a separate WC. Dwelling 3 will have 25sqm of north-oriented secluded private open space plus a further 17.7sqm of open space, equating to a total of 42.7sqm.

8. Dwelling 4 will comprise a bedroom, bathroom, laundry and combined kitchen, living and dining space at ground floor. This dwelling will also have a single car garage and an additional uncovered car parking space. At first floor level, dwelling 4 will comprise two additional bedrooms, a living room, study, a second bathroom and a separate WC. Dwelling 4 will have 25sqm of north-oriented secluded private open space with an additional 15.3sqm of open space, equating to a total of 40.3sqm.

9. Dwelling 5 will be a four-bedroom townhouse. At ground floor level, this dwelling will comprise one bedroom, one bathroom, a laundry and a combined kitchen, living, dining space. At first floor level, this dwelling will comprise three bedrooms, a second bathroom, a separate WC and a living room. This dwelling will also have a single car garage and additional uncovered tandem car parking space. Dwelling 5 will have 25sqm of north-oriented secluded private open space with an additional 20.1sqm of open space, equating to a total of 45.1sqm.

10. Each dwelling will be provided with a rainwater tank. Dwellings 2, 3, 4 and 5 will be provided with a storage shelter whilst Dwelling 1 will be provided with space for storage within the garage.

11. The proposal also includes a common driveway off Park Street which will be shared by Dwellings 2, 3, 4 and 5. Low level landscaping is proposed along the southern boundary adjacent to the driveway. It is proposed to remove all existing vegetation on site. Replacement planting, including canopy trees, is proposed.

12. The attached plans further detail the development, including its layout and finishes.

SUBJECT SITE & SURROUNDS

13. The subject site is located on the west side of Park Street, approximately 230m north of its intersection with Howitt Street. The rectangular shaped site has an area of 1018sqm, with a 20.2m street frontage and a depth of 50.2m. The site is currently occupied by a single storey dwelling with a garage. The site contains considerable vegetation, including mature trees at the front of the site as well as centrally within the site (Figure 1 below). There is one mature street tree located in front of the site. It is noted that the site is not located in a Vegetation Protection Overlay (VPO).

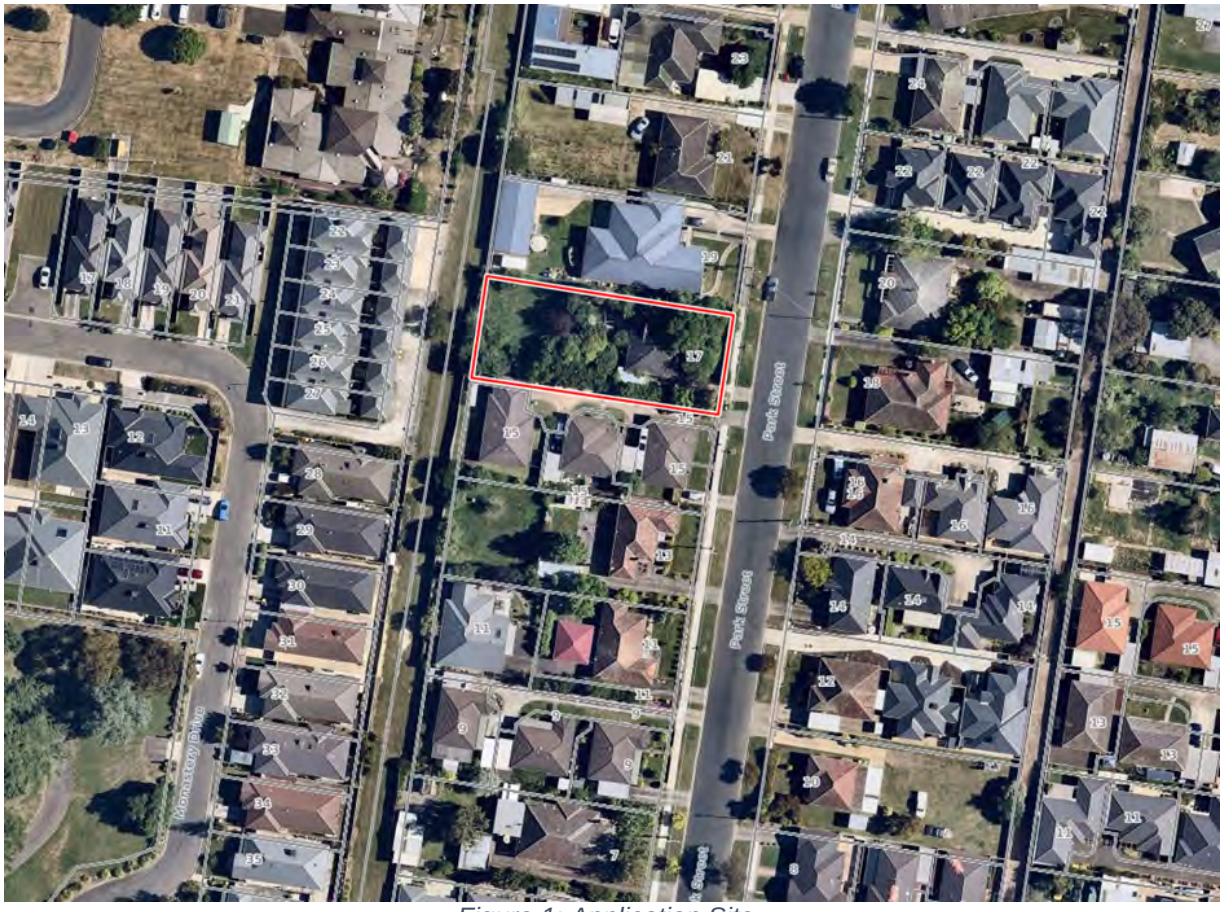


Figure 1: Application Site

14. The immediate surrounding area is an established residential neighbourhood. To the north, the site is adjoined by a single residential dwelling. To the south are three townhouses. To the west is a multi-unit development and directly east (on the opposite

side of Park Street) is a single dwelling. There are also a number of townhouse developments located along Park Street.

15. The Kelaston Aged Care Facility is located to the south-east of the site, on the corner of Park Street and Howitt Street and the Stockland Shopping Centre is located to the north. Whilst this shopping centers' main entrance is on Gillies Street North, it also backs onto Park Street and direct access is available from here. Howitt Street, to the south of the site, accommodates a number of retail services and amenities. Wendouree Primary School and Ballarat Grammar are located within 500m – 750m walking distance of the Site.

16. Bus services extend along Gillies Street North and Howitt Street in close proximity to the site and Wendouree Railway Station is located approximately 750m south-west of the Site.

PLANNING PERMIT HISTORY

17. There is no planning permit history for this site.

PUBLIC NOTIFICATION

18. The following forms of notice were undertaken:
    - Notices sent to the owners and occupiers of all properties in the immediate vicinity of the site; and
    - One public notice displayed along the Park Street frontage.

19. City of Ballarat has received seven (7) letters of objection and a petition signed by 67 parties.

20. The key issues raised by objectors are:

21. <u>Level of Development</u>
    - The number of dwellings on site;
    - The increased density of development along Park Street (with reference to other multi-unit developments that have occurred over the last 20 years);
    - The application represents the overdevelopment of the site.

22. <u>Design</u>
    - The surrounding area is predominantly single storey in character and the proposed development is two-storey;
    - Excessive bulk and scale;
    - Out of keeping with the neighbourhood character;
    - Location of Dwelling 1's garage (too close to the boundary)

23. <u>Amenity</u>
    - Reduction in residential privacy (overlooking of neighbouring dwellings and gardens);
    - Insufficient information to assess overlooking impact;
    - Loss of daylight and sunlight to neighbouring properties

24. <u>Traffic</u>
    - The proposed reduction of two car parking spaces (as per the requirements of Clause 52.06);
    - Increased car parking pressures along Park Street

25. Other
    - Devaluation of neighbouring properties;
    - Potential health and safety issues;
    - Potential increase in crime;
    - Loss of trees;
    - Urban heat island effect due to lack of green space around dwellings;
    - General objections to notification process;
    - General objections to the consistency of application material submitted;
    - Construction impacts (noise)

EXTERNAL REFERRALS

26. None required

INTERNAL REFERRALS

27. The application was internally referred to Council's Traffic and Transport Team and Engineering Team. Their comments are provided below:

Department	Advice
Traffic & Transport	*The following is the Traffic and Transport Section's review of the proposed development of five dwellings (as amended) at 17 Park Street, Wendouree. Advice of the amended referral was received on 20 August 2021.* *The 1,012sqm site on the west side of Park Street has a 20.12m street frontage. It is occupied by a single storey brick veneer dwelling. The building is to be removed prior to development. The site is in the Residential Growth Zone and the street is a local access road under council management.* *The street frontage has a sealed road pavement, concrete kerb & channel and footpath and grassed nature strip.* *There will be five semi-detached double storey 2-bedroom dwellings running down the north side of the rectangular site with a shared accessway down the south side. The front dwelling will have 4 bedrooms and the remaining four will have 3 bedrooms each.* *There is no proposal to subdivide the dwellings at this stage.* *Layout and Property Access* *The 4-bedroom dwelling at the front of the site will have separate access from a new crossover to be constructed at the northern end of the street frontage. The remaining 3-bedroom dwellings will utilise an existing crossover and a new shared accessway.* *A revised swept path analysis has been provided for vehicles in the shared accessway. These indicate that corrective maneuvers will not be required to access all garages. All turning vehicles can undertake simple 2-point manoeuvres and enter and exit the shared accessway in a forward direction in a safe and convenient manner.* *The shared accessway and independent driveway shall be set out generally as indicated on any approved plans and constructed to council approval.*

	A separate crossing permit should be sought from City of Ballarat to check the compliance of the existing crossing and construct a new crossover. All works required shall be arranged by the Applicant and be at his/her cost. *Waste collection should be arranged through Council's Waste Management Unit. Any service provided by Council shall be in approved bins located at the kerbside on the prescribed collection days.* *Mailbox facilities should be suitably located inside the property line.* *<u>Parking</u>* *Under Clause 52, 2 spaces for each 3 or more-bedroom dwelling with 1 under cover should be provided. The 4-bedroom dwelling at the front will have single garage with a tandem space in the independent driveway. Two of the 3-bedroom dwellings off the shared accessway will have single garages with a drive through space beyond the garage. Another will have a single garage and an open space in front of the adjacent dwelling. One dwelling will have a single garage only. A visitor parking space as prescribed under Clause 52.06 is not provided, however dispensation is supported for this space. Dispensation is not supported for dwelling 2 with a single garage only as requested by the Applicant.* *A Parking Demand Assessment has been prepared a qualified Traffic Consultant to support the application. The Assessment included a car parking demand survey conducted to determine available parking within 250m of the subject site. There are approximately 69 on-street car parking spaces available to residents. The closest public bus stop to the site, Vision Australia bus stop, is approximately 280m away or a 4-minute walk.* *The demand study indicated low occupancy throughout the day with the highest occupancy (42%) observed at 12:00pm on Thursday. The average occupancy for this area is 37% with demand rarely exceeding 40%. The Consultant concludes there are a sufficient vacant on-street parking spaces for residents and visitors to utilise.* *In an established residential precinct such as this, officers are of the view that a second space should be provided for all dwellings in conformance with Clause 52.06.* *The dimensions of garages, parking spaces and driveways should comply with the design standards of clause 52.06-9 of the Planning Scheme.* *Recommendations* *1. That the development of five dwellings at 17 Park Street, Wendouree is not supported as presented.* *2. That a second parking space is provided for dwelling 2 or conversely the plans are modified to show 2- bedrooms only.* *3. That the layout and dimensions of the shared accessway, independent driveway garages and parking spaces meet the requirements of Clause 52.06-9 of the Planning Scheme and are generally as indicated on the approved site plan.* *4. That the shared accessway, independent driveway and street crossings are constructed to council approval and drained to a legal point of discharge.*

	5. *That all traffic using the shared accessway enters and exits in a forward direction.* 6. *That the Applicant makes a separate application for a crossing permit to check the compliance of the existing crossover and construct a second crossing. The arrangements and costs of all necessary works shall be borne by the Applicant.* 7. *That Waste collection services are arranged through Council's Waste Management Unit. Any service provided by Council shall be in approved bins located at the kerbside as agreed on the prescribed collection days.* 8. *That mailbox facilities are suitably located within the property line.*
Officer comment	Whilst Planning Officers acknowledge the concerns raised by Traffic & Transport, having reviewed the materials submitted by the applicant, and given the site's accessible location, officers are comfortable that the traffic and parking solutions proposed are acceptable in their current form. Importantly, in a Residential Growth Zone such as this, increased scales and densities are encouraged. This is considered appropriate in a traffic and parking sense given the proximity of a variety of public transport services.

Department	**Advice**
Engineering	Verbal advice was received on 18 March 2022. This advice confirmed the need to include standard conditions upon any permit issued.
Officer comment	Acknowledged. Standard conditions have been included.

OFFICER DIRECT OR INDIRECT INTEREST

28. No officer involved in the preparation of this report has declared a conflict of interest.

PLANNING PERMIT TRIGGERS

29. A Planning Permit is triggered for the proposed development by the following clauses of the Planning Scheme:

- 32.07-5 Construct two or more dwellings on a lot
- 52.06-3 Reduction in car parking requirements

PLANNING POLICY FRAMEWORK & LOCAL PLANNING POLICY

30. The following policies are relevant to the consideration of this application:

- Clause 11.01 – Victoria

    - Clause 11.01-1S – Settlement
    - Clause 11.01-1R – Settlement: Central Highlands
- Clause 11.02 – Managing Growth
    - Clause 11.02-1S – Supply of Urban Land
- Clause 15.01 – Built Environment
    - Clause 15.01-2S – Building Design
    - Clause 15.01-3S – Neighbourhood Character
- Clause 16.01-2S – Residential Development
    - Clause 16.01-001S – Housing Supply
    - Clause 16.01-3S – Housing Diversity
- Clause 19.03 – Development Infrastructure
    - Clause 19.03-3S – Integrated Water Management
- Clause 21 – Municipal Strategic Statement
    - Clause 21.01 – Municipal Overview
    - Clause 21.02 – Settlement and Housing
    - Clause 21.03 – Environmental and landscape values
    - Clause 21.06 - Built form, heritage and design

31. The relevant planning policy framework is discussed in the Key Issues section of this report.

ZONING

32. The site is located in a Residential Growth Zone – Schedule 1 (RGZ1).

33. Clause 32.07 sets out that the purposes of the RG1Z, as follows:

    - *To implement the Municipal Planning Strategy and the Planning Policy Framework.*
    - *To provide housing at increased densities in buildings up to and including four storey buildings.*
    - *To encourage a diversity of housing types in locations offering good access to services and transport including activity centres and town centres.*
    - *To encourage a scale of development that provides a transition between areas of more intensive use and development and other residential areas.*
    - *To ensure residential development achieves design objectives specified in a schedule to this zone.*
    - *To allow educational, recreational, religious, community and a limited range of other non-residential uses to serve local community needs in appropriate locations.*

34. The application seeks to deliver five, two-storey dwellings which will benefit from excellent access to existing public transport services, as well as being located in close proximity to existing retail facilities and amenities at Stockland Wendouree Shopping Centre and along Howitt Street. The site is also located near to existing schools (including Wendouree Primary School and Ballarat Grammar School). The development will increase local prevailing densities when compared to existing development in the immediate surrounding area. However, the development still achieves identified design objectives and performance standards and maintains a sympathetic relationship with surrounding sites. Importantly, the purposes of the RGZ1 include to intensify residential densities to reflect the opportunities available to the site due to its proximity to services and facilities. The proposal is consistent with the purposes of the RGZ1 in this regard.

35. Clause 32.07-9 prescribes a maximum building height of 13.5m. The proposal has a maximum building height of 8.0m and two storeys only.

OVERLAYS

36. The site is not affected by any overlays.

PARTICULAR PROVISIONS

37. The following Particular Provisions are relevant to the proposal:

38. Clause 52.06 (Car Parking)
Clause 52.06 applies to:
    - *a new use; or*
    - *an increase in the floor area or site area of an existing use; or*
    - *an increase to an existing use by the measure specified in Column C of Table 1 in Clause 52.06-5 for that use.*

    Before:
    - *a new use commences; or*
    - *the floor area or site area of an existing use is increased; or*
    - *an existing use is increased by the measure specified in Column C of Table 1 in Clause 52.06-5 for that use*

39. Clause 52.06 requires the following car parking spaces:
    - 2 spaces to each three or more bedroom dwelling plus;
    - 1 space for visitors every five dwellings for developments of five or more dwellings

    The proposal comprises two four-bedroom dwellings and three-bedroom dwellings.

    As such,10 resident parking spaces and one visitor parking space are required. A total of nine parking spaces, being two for each dwelling except Dwelling 2 for which only one parking space is proposed. No visitor parking is provided.

    As the proposal represents a shortfall in car parking against the requirements of Clause 52.06, a parking needs assessment has been submitted. The car parking demand survey assessed available parking within 250m of the subject site. It was found that there are approximately 69 on-street car parking spaces available that residents and their visitors could utilise. The car parking survey was conducted across multiple days and at peak times for school drop off and pick up. The parking survey results indicate that there are sufficient spaces available for use. It is also noted that the site has excellent access to existing public transport services and is within walking distance of retail, services, amenities and schools.

    On balance, it is considered that a reduction of two parking spaces can be supported. In terms of design standards, Clause 52.06-9 requires that car spaces within garages or carports must be at least six metres long and 3.5 metres wide for a single space and 5.5 metres wide for a double space, as measured inside the garage or carport. Where parking spaces are provided in tandem (one space behind the other) an additional 500mm in length must be provided between each space. Where two or more car parking spaces are provided for a dwelling, at least one space must be under cover. Dwellings 1, 3, and 5 will have two car parking spaces provided in tandem. One space will be under cover, located within a garage, whilst the second space will not be under cover. Dwelling 4 will also be provided with two car parking spaces, one of which is in

a garage and one which is uncovered. Dwelling 4's car parks are not provided in tandem.

Dwelling 1's garage is sufficiently sized (3.5m by 6.0m) and is adjoined by a 3m wide driveway, which is long enough (7.5m) to park an additional car in tandem.

Dwelling 2 and Dwelling 4's garages are sufficiently sized to park one car each, being 3.5m by 6.5m.

Dwelling 4's additional car park, which is open-air, measures 3.0m by 6.0m.
Dwellings 3 and 5 both have garages which measure 3.5m by 6.5m. The additional tandem parking space is located to the rear and measures 5.0m by 3.5m. This represents a shortfall against the requirement for a length of 12.5 metres for tandem car parks. This is considered acceptable given the 2nd space is not confined by built form

40. With respect to accessway design, Clause 52.06-9 requires accessways to:
    - Be at least 3 metres wide;
    - Have an internal radius of at least 4 metres at changes of direction or intersection or be at least 4.2 metres wide;.

If the accessway serves four or more car spaces or connects to a road in a Transport Zone, the accessway must be designed so that cars can exit the site in a forwards direction.

41. The proposed accessway has a minimum width of 3m, which is maintained for the full extent of the site. Swept paths have been submitted which demonstrate all cars can exit in a forwards direction as required.

42. Clause 52.17 (Native Vegetation)
    The purpose of the clause is to *'ensure that there is no net loss to biodiversity as a result of the removal, destruction or lopping of native vegetation*.' Planning approval is required to remove, destroy or lop native vegetation, including dead vegetation.

43. It is noted that Clause 73.01 defines native vegetation as *'plants that are indigenous to Victoria, including trees, shrubs, herbs and grasses.*

44. The Development Impact Assessment (13/08/2021) prepared by Axiom Tree Management submitted with the application confirms that:
    - Forty-seven (47) trees were assessed on and adjoining the subject site;
    - Most trees assessed were self-sown common exotic ornamental fruiting and garden specimens;
    - No self-sown Victorian native specimens were present on the Site.

45. Given that the trees on-site are not native vegetation, the requirements of Clause 52.17 are not applicable.

46. Clause 53.01 (Public Open Space Contribution)
    A person who proposes to subdivide land must make a contribution to the council for public open space in an amount specified in the schedule to this clause (being a percentage of the land intended to be used for residential, industrial or commercial purposes, or a percentage of the site value of such land, or a combination of both). If

no amount is specified, a contribution for public open space may still be required under section 18 of the *Subdivision Act 1988*

The proposal does not include subdivision and all five proposed dwellings will be located on one lot. As such, Clause 53.01 is not applicable. Should a future permit application seek approval to subdivide the land the provisions of Clause 53.01 will then apply.

47. Clause 55 (Two or more dwellings on a lot)
Provisions in Clause 55 apply to an application over a site located in the Neighbourhood Residential Zone, General Residential Zone, Residential Growth Zone, Mixed Use Zone or Township Zone, which seeks to:
    - Construct a dwelling if there is at least one dwelling existing on the lot,
    - Construct two or more dwellings on a lot,
    - Extend a dwelling if there are two or more dwellings on the lot,
    - Construct or extend a dwelling on common property, or
    - Construct or extend a residential building.

48. Clause 55 is relevant to this application. A Clause 55 assessment is provided at Attachment A. The proposal meets the majority of the Standards within Clause 55. Some concessions are sought, with respect to Standard B15, B17, B18, B19, B22. However, the development is fully compliant with the corresponding objectives. It is emphasised that the proposal primarily seeks to meet the purposes of the RGZ1 and this can often result in certain built form standards being contravened in an effort to achieve a suitable density in context. As such, on balance, it is considered that addressing Objectives 55.03-10, 55.04-1, 55.04-2, 55.04-3, and 55.04-5 in lieu of the related performance standards will ensure an appropriate built form outcome.

49. Please refer to the full Clause 55 Assessment contained in Attachment A for further detail.

KEY MATTERS

50. Policy support
The proposal for five dwellings is consistent with Clauses 11.01-1S, 11.01-1R (Settlement) and 11.02-1S, as it contributes to urban consolidation objectives by increasing housing choice within an established residential area, with convenient access to existing services.

    Ballarat is forecast to grow significantly towards 160,000 people by 2040. Clause 21.02-1 (Urban Growth) recognises that most of this increased population is planned to be accommodated through infill in established areas and the application assists in achieving this objective.

    The Ballarat Strategy (2015) outlines a shared community vision for a greener, more vibrant and connected Ballarat, embracing the concept of a '10 Minute City'. The '10 Minute City' concept contained in Clause 21.01-3 reflects community aspirations to maintain existing levels of access to destinations and services even when the city grows over time. Maintaining a compact, efficient and productive settlement form is noted in local policy as being critical to Ballarat's long-term future as a 10 Minute City. Specific guidance is provided on change in the following areas (as identified under Clause 21.02-1 and in Figure 2 -Housing Framework Plan):
    - Areas of convenience living.
    - Urban renewal precincts.

- Strategic investigation areas.
- Prioritised completion of the Ballarat West Growth Area.
- Longer-term greenfield investigation areas.
- Townships.
- Ongoing change areas.

The subject site is located in an urban renewal area and an ongoing change area. Clause 21.02-2 states ongoing change areas are residential areas that are valued for their existing suburban character and housing supply. Infill development is encouraged at a scale appropriate to their relative distance to high frequency public transport corridors, activity centres, employment and taking into account neighbourhood character. Clause 21.02-3 identifies that urban renewal precincts are sites or areas with significant potential for large-scale renewal and redevelopment. The Wendouree Village is an identified urban renewal precinct.

In addition to being within an Ongoing Change Area, the site is located in the Residential Growth Zone, which seeks to provide housing at increased densities in buildings up to and including four storeys whilst also encouraging a diversity of housing types in locations offering good access to services and transport including activity centres and town centres.

The development of five dwellings on a 1012 sqm lot is considered an appropriate outcome for the site in the context of the purposes of the RGZ1. Specifically, the development provides for a higher-density in a location with excellent access to existing retail, services, amenities and transport connections, whilst still providing an appropriate transition from existing surrounding lower densities. The development is also consistent with the objectives of an ongoing change area and this urban renewal precinct.

Overall, there is clear policy support for the development proposal.

51. Does the proposal provide an appropriate design response?
The proposal comprises five two-storey townhouses, featuring pitched roofs, integrated garages, a combination of brick veneer cladding, render and metal Colourbond roofing with front porches and no front fence. Pitched roofs, brick and low or no front fences are common features of the local area and the proposal is consistent with the existing neighbourhood character in this regard.

It is acknowledged that the local area predominantly features single storey dwellings. However, a two-storey development on this site is considered to be an appropriate outcome, noting that the RGZ1 otherwise allows for up to four storeys.

The design response provides an appropriate transition between the existing predominantly low-density character of the neighbourhood and the anticipated future neighbourhood character of the area, as envisioned by the RGZ1 and this identified urban renewal area.

52. Does the proposal provide a satisfactory traffic and parking solution?
The application is supported by a Traffic Impact Assessment, Parking Needs Assessment and Swept Path drawings.

The proposal seeks a reduction of two car parking spaces against the requirements of Clause 52.06 and will deliver nine residential parking spaces for the five dwellings, with

no visitor parking space proposed. This represents a shortfall of one resident parking space and one visitor parking space.

The car parking needs assessment accompanying the application identified that there were a considerable number of parking spaces available along surrounding streets which would appropriately off-set any car parking shortfall on site. Furthermore, the site is located within walking distance of existing public transport services and also within walking distance to existing retail, services and amenities. Accordingly, car dependency would likely be reduced.

Officers are comfortable with the reduction in car parking spaces provided, noting the site context and the findings of the car parking analysis.

With respect to access, it is noted that the submitted swept paths demonstrate that all vehicles can enter and exit the site in a forwards direction. Visibility splays have been shown on the plans to ensure vehicle and pedestrian safety. In terms of trip generation, the traffic impact assessment anticipates that daily vehicle trips associated with the site will range from 25 – 32.5 trips and anticipated weekday peak hour vehicle trips will range from 2.5 – 3.3 trips. Council agrees with the findings of the traffic impact report, that the traffic generated by the development would be minimal and is not expected to generate any significant adverse impacts on the local road network.
Overall, the proposal provides a satisfactory traffic and parking solution.

53. Does the proposal result in any adverse amenity impacts?
In terms of residential privacy, it is noted that 1.8m high timber fences are proposed along the subject site's boundary with 19 Park Street. This approach will mitigate mutual overlooking between the private open space of proposed Dwellings 2, 3, 4 and 5 and 19 Park Street. At first floor level, the proposed north-facing windows will be fitted with privacy screens and/or frosted glass to a height of 1.7m above floor level. As such, this will mitigate overlooking to the windows and open spaces of 19 Park Street.

The south-facing upstairs windows of all five dwellings will be setback sufficiently to avoid overlooking impacts to the dwellings at 15 Park Street.

No rear facing windows are proposed, and regardless, a minimum setback of 12m to the dwelling at 22-27 Monastery Road will be retained.

In terms of access to sunlight and daylight, the north-facing windows located opposite the subject site in Units 1, 2 and 3 15 Park Street are setback 4m – 6m from the common boundary and development within the Site has been setback from this boundary.

Shadow diagrams have been submitted, with additional shadow drawings completed by the assessing officer. This assessment shows that the extent of overshadowing will comply with relevant performance standards.

54. Does the proposal represent an appropriate outcome in terms of vegetation?
The proposal seeks to remove all existing vegetation from the site. It is understood that all existing vegetation on site is non-native and predominantly comprises small self-sown specimens and exotic species that are unlikely to become canopy trees.
As discussed above, the proposal would not require assessment under Clause 52.17 as the trees are non-native. The applicant has indicated replacement planting, including genuine canopy trees would be provided. To ensure this, the requirement to submit a detailed landscaping plan will be secured by condition. It is also noted that

the existing street tree located within the nature strip at the front of the site will be retained, with tree protection details provided. This will be secured by conditions.

55. **Response to issues raised in objections**

56. Density and Overdevelopment

Concerns regarding the level of development on site was raised by multiple objectors. Specifically, the number of units on the site, as well as the height of the proposed buildings.

It is re-iterated that the site is located in the RGZ1 which allows for increased residential densities on appropriately located sites and also allows for building heights of up to four storeys and 13.5m. Furthermore, the site is located in an urban renewal precinct which comprises areas with significant potential for large-scale renewal and redevelopment

Whilst the proposal would represent a higher density than existing surrounding development (which predominantly comprises 1 – 3 dwellings per lot), the proposal would still be wholly consistent with the density objectives sought for land within the RGZ1.

The proposal is largely compliant with Clause 55 standards and wholly consistent with Clause 55 objectives, including those relating to site coverage, permeability and open space. As such, whilst objector concerns are acknowledged, the proposal is not considered to be an overdevelopment of the site and is consistent with the future directions of this precinct.

57. Residential Amenity

Loss of amenity was raised in multiple objections, generally expressed through privacy and loss of sunlight or daylight to habitable windows or private open spaces. Officers are satisfied the development would not adversely impact on current living conditions and existing levels of residential amenity.

58. Design and Neighbourhood Character

Objector's raised concerns regarding the character of the proposal, particularly noting the height and design would be out of keeping with the neighbourhood character. As discussed previously, the proposed building height and development form is considered appropriate for the site and locality which is emerging and changing. Furthermore, the proposal is considered to have appropriately responded to neighbourhood character, through the use of similar materials, roof forms and no front fencing. The neighbourhood character is changing in this locality and the proposal contributes to this emerging character.

59. Other

A range of other objections were also raised. A number of these issues have been covered in earlier sections of this report.

Additional issues raised and not previously discussed within this report include:

a. Devaluation of neighbouring properties;
b. Potential health and safety issues;
c. Potential increase in crime;
d. Urban heat island effect due to lack of green space around dwellings;
e. The notification process;

f. Inconsistency of application materials;
g. Construction impacts (noise)

In response to (a) it is noted that the value of properties is not a material planning consideration and cannot be taken into assessment.

With regard to item (b), it is unclear how exactly the proposal would impact on health and safety. However, in response to item (g), it is noted that the submission of a Construction Management Plan will be secured by condition and this will address any concerns regarding health and safety, such as noise and dust control during the construction process.

In relation to item (c), it is noted that the proposal has incorporated CPTED principles where possible, ensuring that the proposed communal accessway to Dwellings 2, 3, 4 and 5 will allow for passive surveillance. Furthermore, dwelling 1 will have windows oriented to Park Street, again facilitating passive surveillance.

With respect to item (d), it is emphasised that the development will provide approximately 240sqm of open space on site, in addition to landscaping along the southern property boundary. Furthermore, the applicant has proposed replacement planting including canopy trees, which will be secured by condition. For these reasons, it is considered that the proposal would deliver an appropriate level of green space around the proposed dwellings.

With regards to (e) the Ballarat City Council Policy for Advertising Planning Applications requires that notice be sent to 3 properties behind the site. The officers interpretation of this, based on the intent of the policy to notify parties which may be impacted, was to send notification to parties across the unmade land facing Monastery Drive.

With Regards to (f) it is noted that there are some minor inconsistencies within the documentation provided with the application material, however it is considered there is enough consistent information which can be relied upon to enable an informed assessment and recommendation.

60. Conclusion
The proposal is considered to accord with the relevant decision guidelines of the Ballarat Planning Scheme. It is recommended that a Notice of Decision to Grant a Permit be issued subject to conditions.

OFFICER RECOMMENDATION

61. **That the Planning Delegated Committee:**

61.1 Having caused notice of the application to be given under Section 52 of the *Planning and Environment Act 1987* and having considered all the matters required under Section 60 of the Planning and Environment Act 1987 decides to Grant a Notice of Decision to Grant a Permit under the provisions of the Ballarat Planning Scheme, subject to conditions.

ATTACHMENTS

1. Governance Review [**6.1.1** - 1 page]
2. PLP2021566 Clause 55 Assessment [**6.1.2** - 15 pages]
3. PL P 2021566 17 Park Street Wendouree Plans [**6.1.3** - 14 pages]
4. PLP2021566 Delegated Recommendation Conditions [**6.1.4** - 6 pages]

ALIGNMENT WITH COUNCIL VISION, COUNCIL PLAN, STRATEGIES AND POLICIES

1. This report aligns with Council's Vision, Council Plan, Strategies and Policies.

COMMUNITY IMPACT

2. There are no community impacts identified for the subject of this report.

CLIMATE EMERGENCY AND ENVIRONMENTAL SUSTAINABILITY IMPLICATIONS

3. There are no climate emergency and environmental sustainability implications identified for the subject of this report.

ECONOMIC SUSTAINABILITY IMPLICATIONS

4. There are no economic sustainability implications identified for the subject of this report.

FINANCIAL IMPLICATIONS

5. If applicable, the cost of running a VCAT hearing is already included within the Statutory Planning Unit's approved budget.

LEGAL AND RISK CONSIDERATIONS

6. There are no legal and risk considerations relevant to the subject of this report.

HUMAN RIGHTS CONSIDERATIONS

7. It is considered that the subject of this report does not impact on any human rights identified in the *Charter of Human Rights and Responsibilities Act 2006.*

COMMUNITY CONSULTATION AND ENGAGEMENT

8. This planning permit application was advertised pursuant to Section 52 of the *Planning and Environment Act 1987.* Council received seven objections and a petition with 67 signatories.

GENDER EQUALITY ACT 2020

9. There are no gender equality implications identified for the subject of this report.

CONFLICTS OF INTEREST THAT HAVE ARISEN IN PREPARATION OF THE REPORT

10. Council officers affirm that no general or material conflicts need to be declared in relation to the matter of this report.

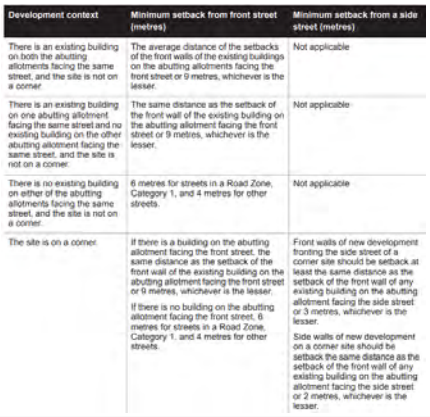
PLP/2021/566
17 Park Street, WENDOUREE VIC 3355

CLAUSE 55 ASSESSMENT

55.02-1 Neighbourhood character objective	**Standard B1**	**Met**	**Comments**
To ensure that the design respects the existing neighbourhood character or contributes to neighbourhood character. *To ensure that development responds to the features of the site and the surrounding area*	*The design response must be appropriate to the neighbourhood and the site.* *The proposed design must respect the existing or preferred neighbourhood character and respond to the features of the site*	Yes	The planning report, drawings and technical information submitted describes the site context and design response. The design response is considered to be appropriate given the RGZ1 zoning of the site, which allows for increased densities in appropriate locations and given the site's excellent access to existing services and amenities including public transport. The two-storey design is considered to be an appropriate design response. Whilst the neighbourhood character is predominantly single storey, the RGZ1 allows for up to four storeys. As such, a two storey proposal represents a balanced response to the zoning and the neighbourhood character.
55.02-2 Residential policy objective	**Standard B3**	**Met**	**Comments**
To ensure that residential development is provided in accordance with any policy for housing in the State Planning Policy Framework and the Local Planning Policy Framework, including the Municipal Strategic Statement and local planning policies. *To support medium densities in areas where development can take advantage of public transport and community infrastructure and services*	*An application must be accompanied by a written statement to the satisfaction of the responsible authority that describes how the development is consistent with any relevant policy for housing in the State Planning Policy Framework and the Local Planning Policy Framework, including the Municipal Strategic Statement and local planning policies.*	Yes	The proposal's built form, whilst representing a higher density than neighbouring buildings, is sympathetic to the existing neighbourhood character and reflects the potential future character of the area as expected within the RGZ1. The development responds to the pattern of development in the surrounding area and the expectation of the future land development and form in this growth area close to transport, schools and facilities.

55.02-3 Dwelling diversity objective	**Standard B3**	**Met**	**Comments**
To encourage a range of dwelling sizes and types in developments of ten or more dwellings	*Developments of ten or more dwellings should provide a range of dwelling sizes and types, including:* • *Dwellings with a different number of bedrooms.* • *At least one dwelling that contains a kitchen, bath or shower, and a toilet and wash basin at ground floor level.*	NA	The proposal seeks approval for five dwellings only.
55.02-4 Infrastructure objective	**Standard B4**	**Met**	**Comments**
To ensure development is provided with appropriate utility services and infrastructure. *To ensure development does not unreasonably overload the capacity of utility services and infrastructure.*	*Development should be connected to reticulated services, including reticulated sewerage, drainage, electricity and gas, if available.*	Yes	The proposal is located in an established residential location and will be connected to existing services. The proposal is for five dwellings only and will not unreasonably exceed the capacity of utility services and infrastructure, including reticulated services and roads.
	Development should not unreasonably exceed the capacity of utility services and infrastructure, including reticulated services and roads.	Yes	
	In areas where utility services or infrastructure have little or no spare capacity, developments should provide for the upgrading of or mitigation of the impact on services or infrastructure.	NA	
55.02-4 Integration with the street objective	**Standard B5**	**Met**	**Comments**
To integrate the layout of development with the street	*Developments should provide adequate vehicle and pedestrian links that maintain or enhance local accessibility.*	Yes	Pedestrian access to Dwelling 1 will be via a proposed pathway from Park Street to the front porch. Vehicle access to Dwelling 1 will be via a proposed driveway from Park Street located on the northern side of the site. Vehicle and pedestrian access to Dwellings 2 – 5 will be via the proposed shared accessway running along the site's southern boundary.
	Development should be oriented to front existing and proposed streets	Yes	Proposed Dwelling 1 is oriented to Park Street. Dwellings 2 – 5 will be oriented to the shared accessway.
	High fencing in front of dwellings should be avoided if practicable	Yes	No front fencing is proposed to Park Street.

	Development next to existing public open space should be laid out to complement the open space.	N/A	The site is not located next to public open space.

55.03-1 Street setback objective	**Standard B6**	**Met**	**Comments**
To ensure that the setbacks of buildings from a street respect the existing or preferred neighbourhood character and make efficient use of the site	*Walls of buildings should be set back from streets the distance specified in Table B1 below.*  **Development context** / **Minimum setback from front street (metres)** / **Minimum setback from a side street (metres)** There is an existing building on both the abutting allotments facing the same street, and the site is not on a corner. — The average distance of the setbacks of the front walls of the existing buildings on the abutting allotments facing the front street or 9 metres, whichever is the lesser. — Not applicable There is an existing building on one abutting allotment facing the same street and no existing building on the other abutting allotment facing the same street, and the site is not on a corner. — The same distance as the setback of the front wall of the existing building on the abutting allotment facing the front street or 9 metres, whichever is the lesser. — Not applicable There is no existing building on either of the abutting allotments facing the same street, and the site is not on a corner. — 6 metres for streets in a Road Zone, Category 1, and 4 metres for other streets. — Not applicable The site is on a corner. — If there is a building on the abutting allotment facing the front street, the same distance as the setback of the front wall of the existing building on the abutting allotment facing the front street or 9 metres, whichever is the lesser. If there is no building on the abutting allotment facing the front street, 6 metres for streets in a Road Zone, Category 1, and 4 metres for other streets. — Front walls of new development fronting the side street of a corner site should be setback at least the same distance as the setback of the front wall of any existing building on the abutting allotment facing the side street or 3 metres, whichever is the lesser. Side walls of new development on a corner site should be setback the same distance as the setback of the front wall of any existing building on the abutting allotment facing the side street or 2 metres, whichever is the lesser.	Yes	The front wall of Dwelling 1 is set back from Park Street 6.5m (on the south side of the lot) to 7.4m (on the north side of the lot). This aligns with the front setback to the existing neighbouring dwellings. Specifically, the front dwelling at 15 Park Street, which adjoins the site to the south, has a front setback of 4.9m. The dwelling at 19 Park Street has a front setback of 8.2m.
	Porches, pergolas and verandahs that are less than 3.6 metres high and eaves may encroach not more than 2.5 metres into the setbacks of this standard.	Yes	Dwelling 1's single storey front porch / verandah does not encroach more than 2.5m into this setback.
55.03-2 Building height objective	**Standard B7**	**Met**	**Comments**
To ensure that the height of buildings respects the existing or preferred neighbourhood character	*The maximum building height should not exceed 9 metres, unless the slope of the natural ground level at any cross section wider than 8 metres of the site of the building is 2.5 degrees or more, in which case the maximum building height should not exceed 10 metres.*	Yes	The proposed dwellings are two storeys only with a maximum height of 8.0m. Regardless, within the RGZ1 the maximum building height is 13.5m.
	Changes of building height between existing buildings and new buildings should be graduated.	Yes	Both adjoining dwellings are single storey. An increase of one storey to a maximum height of 8.0m is considered to be sufficiently gradual, particularly noting that the maximum building height in the RGZ1 is 13.5m.
55.03-3 Site coverage objective	**Standard B8**	**Met**	**Comments**

To ensure that the site coverage respects the existing or preferred neighbourhood character and responds to the features of the site	*The site area covered by buildings should not exceed 60 per cent*	Yes	An area of 435sqm will be covered by the proposed buildings. This equates to 43% of the 1012sqm site.
55.03-4 Permeability objective	**Standard B9**	**Met**	**Comments**
To reduce the impact of increased stormwater run-off on the drainage system *To facilitate on-site stormwater infiltration*	*The site area covered by the pervious surfaces should be at least 20% of the site*	Yes	Approximately 24% of the site area will be permeable. The application is supported by a Storm Report including WSUD Plan and Maintenance Plan which appropriately addresses requirements.
	The stormwater management system should be designed to: • *Meet the current best practice performance objectives for stormwater quality as contained in the Urban Stormwater - Best Practice Environmental Management Guidelines (Victorian Stormwater Committee, 1999).* • *Contribute to cooling, improving local habitat and providing attractive and enjoyable spaces.*	Yes	
55.03-5 Energy efficiency objective	**Standard B10**	**Met**	**Comments**
To achieve and protect energy efficient dwellings and residential buildings *To ensure the orientation and layout of development reduce fossil fuel energy use and make appropriate use of daylight and solar energy*	*Buildings should be:* • *Orientated to make appropriate use of solar energy* • *Sited and designed to ensure that the energy efficiency of existing dwellings on adjoining lots is not unreasonably reduced*	Yes	Dwellings 2, 3, 4 and 5 situate their main living area (the open plan kitchen, dining and living room) and their gardens on the north side of the development. Therefore, the development makes appropriate use of solar energy. Dwelling 1's main living area (the open plan kitchen, dining and living room) and open space is oriented to the east and will still achieve good solar access. The proposed windows to habitable rooms are predominantly oriented north, west and east and will allow for solar access. The site is located in the Residential Growth Zone, and regardless there are no existing rooftop solar
	Living areas and private open space should be located on the north side of the development if practicable	Yes	
	Developments should be designed so that solar access to north-facing windows is maximised	Yes	
	Developments should be sited and designed to ensure that the performance of existing rooftop solar energy systems on dwellings on adjoining lots in a General Residential Zone, Neighbourhood Residential Zone or Township Zone are not unreasonably reduced. The existing rooftop solar energy system must exist at the date the application is lodged	NA	

			energy systems located on lots directly adjoining the site.
55.03-6 Open space objective	**Standard B11**	**Met**	**Comments**
To integrate the layout of the development with any public and communal open space provided in or adjacent to the development	*If any public or communal open space is provided on site, it should:* • *Be substantially fronted by dwellings, where appropriate* • *Provide outlook for as many dwellings as practicable* • *Be designed to protect any natural features on the site* • *Be accessible and useable*	NA	No public or communal open space is proposed.
55.03-7 Safety objective	**Standard B12**	**Met**	**Comments**
To ensure the layout of development provides for the safety and security of residents and property	*Entrances to dwellings should not be obscured or isolated from the street and internal accessways*	Yes	The proposed entrance to Dwelling 1 is located to the front of the site, oriented to Park Street. The entrances to Dwellings 2 – 5 are from the shared accessway. The proposed entrances are considered clear, easy to access and provides for the safety and security of residents and property. The planting details contained within the application will not create unsafe spaces. The proposed dwellings have been designed to facilitate casual surveillance on the proposed accessway, ensuring safety and security. The only private spaces on site are each dwelling's gardens. All private gardens are secured by 1.8m high timber fencing
	Planting which creates unsafe spaces along streets and accessways should be avoided	Yes	
	Developments should be designed to provided good lighting, visibility and surveillance of car parks and internal accessways	Yes	
	Private spaces within developments should be protected from inappropriate use as public thoroughfares	Yes	
55.03-8 Landscaping objective	**Standard B13**	**Met**	**Comments**
To encourage development that respects the landscape character of the neighbourhood	*The landscape layout and design should:* • *Protect any predominant landscape features of the neighbourhood* • *Take into account the soil type and drainage patterns of the site* • *Allow for intended vegetation growth and structural protection of buildings*	Yes	Indicative landscaping details have been included on the plans. The proposal includes low level landscaping along the southern boundary.

To encourage development that maintains and enhances habitat for plants and animals in locations of habitat importance *To provide appropriate landscaping* *To encourage the retention of mature vegetation on the site*	• *In locations of habitat importance, maintain existing habitat and provide for new habitat for plants and animals* • *Provide a safe, attractive and functional environment for residents*		The existing vegetation on site is non-native and is not considered to specifically contribute to the neighbourhood character. The applicant proposes to plant two new canopy trees within the front setback, and this can secured as part of a future landscape plan. A detailed landscaping plan should be provided to fully address Standard B13, and this will be secured by condition.
	Development should provide for the retention or planting of trees, where these are part of the character of the neighbourhood	N/A	
	Development should provide for the replacement of any significant trees that have been removed in the 12 months prior to the application being made	Yes	
	The landscape design should specify landscape themes, vegetation (location and species), paving and lighting	Yes	
55.03-9 Access objective	**Standard B14**	**Met**	**Comments**
To ensure the number and design of vehicle crossovers respects the neighbourhood character	*The width of accessways or car spaces should not exceed:* • *33% of the street frontage, or* • *if the width of the street frontage is less than 20m, 40% of the street frontage*	Yes	The site has a frontage of approximately 20m onto Park Street. One shared accessway with a width of 3m is proposed, in addition to a private driveway to Dwelling 1, which also has a width of 3m. As such, a total of 6m is proposed to be accessways, which equates to 30% of the frontage.
	No more than one single-width crossover should be provided for each dwelling fronting a street	Yes	Two single-width crossovers are proposed. One will serve Dwelling 1, and the second will serve Dwellings 2, 3, 4 and 5.
	The location of crossovers should maximize the retention of on-street car parking spaces	Yes	The two crossovers have been located at the northern and southern end of the site to ensure the maximum gap is available in between. This ensures on-street car parking is still possible in front of the property.
	The number of access point to a road in a Road Zone should be minimised	NA	Park Street does not form part of a Transport Zone.
	Developments must provide access for service, emergency and delivery vehicles	Yes	The development will be accessible by service, emergency and delivery vehicles from Park Street

55.03-10 Parking location objective	**Standard B15**	**Met**	**Comments**
To provide convenient parking for resident and visitor vehicles *To protect residents from vehicular noise within developments*	*Car parking facilities should:* • *Be reasonably close and convenient to dwellings and residential buildings* • *Be secure* • *Be well ventilated if enclosed*	Yes	Each proposed dwelling has its own lock up garage providing secure parking for one vehicle. The garages are integrated into the design of the dwellings and are therefore very convenient in terms of access.
	Shared accessways or car parks of other dwellings and residential buildings should be located at least 1.5m from the windows of habitable rooms. This setback may be reduced to 1m where there is a fence at least 1.5m high or where window sills are at least 1.4m above the accessway	Obj. Met	The shared accessway is setback 1m from habitable windows into Dwellings 3, 4 and 5, and the window sills are not 1.4m above the accessway. On balance, given the limited number of vehicle movements associated with this development, the proposed windows are not expected to be unduly affected by vehicle noise, such that Objective 55.03-10 would be achieved.

55.04-1 Side and rear setbacks objective	**Standard B17**	**Met**	**Comments**
To ensure that the height and setback of a building from a boundary respects the existing or preferred neighbourhood character and limits the impact on the amenity of existing dwellings	*A new building not on or within 200mm of a boundary should be set back from side or rear boundaries 1 metre, plus 0.3 metres for every metre of height over 3.6 metres up to 6.9 metres, plus 1 metre for every metre of height over 6.9 metres.*	Obj. Met	The proposal meets the objectives of 55.04.-1. The proposal has generous setbacks around the building. There is a 6.9m long wall on the north boundary facing 19 Park Street but this does not impact on the adjoining dwelling which is setback 2.1m. Boundary setbacks and roof forms are also carefully designed to reduce visuals impact to adjoining properties.
	Sunblinds, verandahs, porches, eaves, fascias, gutters, masonry chimneys, flues, pipes, domestic fuel or water tanks, and heating or cooling equipment or other services may encroach not more than 0.5m into the setbacks of this standard		
	Landings having an area of not more than 2sqm and less than 1m high, stairways, ramps, pergolas, shade sails and carports may encroach into the setbacks of this standard		
55.04-2 Walls on boundaries objective	**Standard B18**	**Met**	**Comments**
To ensure that the location, length and height of a wall on a boundary respects the	*A new wall constructed on or within 200mm of a side or rear boundary of a lot or a carport constructed on or within 1 metre of a side or rear boundary of a lot*	Obj. Met	Dwelling 1's single storey garage is constructed on the northern property boundary but has a

existing or preferred neighbourhood character and limits the impact on the amenity of existing dwellings	*should not abut the boundary for a length of more than:* ▪ *10 metres plus 25 per cent of the remaining length of the boundary of an adjoining lot, or* ▪ *Where there are existing or simultaneously constructed walls or carports abutting the boundary on an abutting lot, the length of the existing or simultaneously constructed walls or carports,* *whichever is the greater.*		maximum length of 7m, which complies with Standard B18. The proposal includes a 13m long two-storey wall built along the rear boundary, which would not comply with Standard B18. However, the proposal meets the objectives of 55.04-2, noting there is a long, narrow, unmade lane to the rear of the site, ensuring a minimum setback of 12m to the nearest residential development (at 22 – 27 Monastery Drive).
	A new wall or carport may fully abut a side or rear boundary where slope and retaining walls or fences would result in the effective height of the wall or carport being less than 2 metres on the abutting property boundary.		
	The height of a new wall constructed on or within 200mm of a side or rear boundary or a carport constructed on or within 1 metre of a side or rear boundary should not exceed an average of 3.2 metres with no part higher than 3.6 metres unless abutting a higher existing or simultaneously constructed wall.		
55.04-3 Daylight to existing windows objective	**Standard B19**	**Met**	**Comments**
To allow adequate daylight into existing habitable room windows	*Buildings opposite an existing habitable room window should provide for a light court to the existing window that has a minimum area of 3sqm and minimum dimensions of 1m clear to the sky. The calculation of the area may include land on the abutting lot*	Obj Met	The proposal will meet the objective of 55.04-3, ensuring neighbouring properties will retain adequate access to daylight via habitable room windows. Habitable windows located opposite the subject site within the dwelling at 19 Park Street are setback approximately 2m from the common boundary. Habitable windows located opposite the subject site in Unit 1 / 15 Park Street are setback 4m from the common boundary. Habitable windows located opposite the subject site in Unit 2 / 15 Park Street are setback 6m from the common boundary.
	Walls or carports more than 3m in height opposite an existing habitable room window should be set back from the window at least 50% of the height of the new wall if the wall is within a 55^{o} arc from the centre of the existing window. The arc may be swung to within 35^{o} of the plane of the wall containing the existing window *Where the existing window is above ground floor level, the wall height is measured from the floor level of the room containing the window* *Refer to Diagram B2*		

			There are no habitable windows located in Unit 3 / 15 Park Street oriented to the shared boundary with the subject site. Habitable windows located in the dwellings at 22 – 27 Monastery Drive to the rear are setback a minimum of 12m.
55.04-4 North facing windows objective	**Standard B20**	**Met**	**Comments**
To allow adequate solar access to existing north-facing habitable room windows	*If a north-facing habitable window of an existing dwelling is within 3m of a boundary on an abutting lot, a building should be setback from the boundary 1m, plus 0.6m for every metre of height over 3.6m up to 6.9m, plus 1m for every metre of height over 6.9m, for a distance of 3m from the edge of each side of the window. A north-facing window is a window with an axis perpendicular to its surface oriented north 20 degrees west to north 30 degrees east.* *Refer to Diagram B3*	N/A	There are no north-facing habitable window in existing dwellings within 3m of the Site. North-facing windows located opposite the subject site in Unit 1 / 15 Park Street are setback 4m from the joint boundary. North facing windows located opposite the subject site in Unit 2 / 15 Park Street are setback 6m from the common boundary. The only north facing windows located in Unit 3 / 15 Park Street is setback more than 6m from the common boundary.
55.04-5 Overshadow open space objective	**Standard B21**	**Met**	**Comments**
To ensure buildings do not significantly overshadow existing secluded private open space	*Where sunlight to secluded private open space of an existing dwelling is reduced, at least 75%, or 40sqm with minimum dimension of 3m, whichever is the lesser area, of the secluded private open space should receive a minimum of five hours of sunlight between 9am and 3pm on 22 September*	Yes	Shadow diagrams for the 22nd of September have been assessed and the secluded private open space of 1-3/15 Park Street will receive a minimum of 25sqm of sunlight for 5 hours between 9am-3pm.
	If existing sunlight to the secluded private open space of an existing dwelling is less than the requirements of this standard, the amount of sunlight should not be further reduced		

55.04-6 Overlooking objective	**Standard B22**	**Met**	**Comments**
To limit views into existing secluded private open space and habitable room windows	*A habitable room window, balcony, terrace, deck or patio should be located and designed to avoid direct views into the secluded private open space of an existing dwelling within a horizontal distance of 9m (measured at ground level) of the window, balcony, terrace, deck or patio. Views should be measured within a 45^{o} angle from the plane of the window or perimeter of the balcony, terrace, deck or patio, and from a height of 1.7m above the floor level*	Obj. Met	Privacy screens and/or frosted glass to a height of 1.7m above floor level is proposed. Dwelling 2, 3, 4 and 5's north facing upstairs windows will be screened to limit any potential overlooking impacts to 19 Park Street. The south-facing upstairs windows of all five dwellings will be setback sufficiently to avoid overlooking impacts to the dwellings at 15 Park Street. No rear facing windows are proposed. Dwelling 1 has a balcony which is oriented to Park Street and will not directly overlook any neighbouring properties. No other balconies are proposed. Timber fencing to a height of 1.8m is proposed to private open spaces to reduce mutual overlooking.
	A habitable room window, balcony, terrace, deck or patio with a direct view into a habitable room window of an existing dwelling within a horizontal distance of 9m (measured at ground level) of the window, balcony, terrace, deck or patio should be either: • *offset a minimum of 1.5m from the edge of one window to the edge of the other* • *have sill heights of at least 1.7m above floor level* • *have fixed, obscure glazing in any part of the window below 1.7m above floor level* • *have permanently fixed external screens to at least 1.7m above floor level and be no more than 25% transparent*		
	Obscure glazing in any part of the window below 1.7m above floor level may be openable provided that there are no direct views as specified in this standard		
	Screens used to obscure a view should be: • *perforated panels or trellis with a maximum of 25% openings or solid translucent panels* • *permanent, fixed and durable* • *designed and coloured to blend with the development*		
55.04-7 Internal views objective	**Standard B23**	**Met**	**Comments**
To limit views into the secluded private open space and habitable room windows of dwellings and residential buildings within a development	*Windows and balconies should be designed to prevent overlooking of more than 50% of the secluded private open space of a lower-level dwelling or residential building directly below and within the same development*	Yes	Dwelling 1 has a balcony which is oriented to Park Street and will not directly overlook any neighbouring properties. Dwellings 2, 3, 4 and 5 do not feature balconies.

			Privacy screens and/or frosted glass to a height of 1.7m above floor level is proposed across Dwelling 2, 3, 4 and 5's north facing upstairs windows to limit any potential overlooking impacts to 19 Park Street. Overall, less than 50% of 19 Park Street's open space will be overlooked. The south-facing upstairs windows of all five dwellings will be setback sufficiently to avoid overlooking impacts to the dwellings at 15 Park Street. The proposal includes 1.8m high timber fences to all private open spaces to ensure that the privacy of each proposed dwelling's secluded private open space will be protected.
55.04-8 Noise impacts objective	**Standard B24**	**Met**	**Comments**
To contain noise sources in developments that may affect existing dwellings *To protect residents from external noise*	*Noise sources, such as mechanical plant, should not be located near boundaries of immediately adjacent existing dwellings*	NA	No mechanical plant is proposed as part of the development.
	Noise sensitive rooms and secluded private open spaces of new dwellings and residential buildings should take account of noise sources on immediately adjacent properties	NA	There are no significant noise sources on immediately adjacent properties.
	Dwellings and residential buildings close to busy roads, railway lines or industry should be designed to limit noise levels in habitable rooms	NA	The development site is not located close to any busy roads, railway lines or industry.

55.05-1 Accessibility objective	**Standard B25**	**Met**	**Comments**
To encourage the consideration of the needs of people with limited mobility in the design of developments	*The dwelling entries of the ground floor of dwellings and residential buildings should be accessible or able to be easily made accessible to people with limited mobility.*	Yes	All proposed dwellings are accessible from ground floor level. The car parking finished surface level is very similar to the dwelling finished floor level and this will allow for at grade access. All dwellings have been designed to provide a bedroom, bathroom and the main kitchen, living and

			dining space at ground floor level to cater to all accessibility requirements.
55.05-2 Dwelling entry objective	**Standard B26**	**Met**	**Comments**
To provide each dwelling or residential building with its own sense of identity	*Entries to dwellings and residential buildings should:* • *be visible and easily identifiable from streets and other public areas* • *provide shelter, a sense of personal address and a transitional space around the entry*	Yes	Access to each dwelling is via a front porch which is clearly visible either from Park Street or from the shared accessway. The proposed front porches provide shelter and clearly delineate the address and individual entry of each dwelling.
55.05-3 Daylight to new windows objective	**Standard B27**	**Met**	**Comments**
To allow adequate daylight into new habitable room windows	*A window in a habitable room should be located to face:* • *an outdoor space or a light court with a minimum area of 3sqm and minimum dimension of 1m clear to the sky, not including land on an abutting lot, or* • *a verandah provided it is open for at least one third its perimeter, or* • *a carport provided it has two or more open sides and is open for at least one third of its perimeter*	Yes	All proposed habitable windows achieve an outdoor space or a light court with a minimum area of 3sqm and minimum dimension of 1m clear to the sky, located within the development site. No verandahs or windows to car ports are proposed.
55.05-4 Private open space objective	**Standard B28**	**Met**	**Comments**
To provide adequate private open space for the reasonable recreation and service needs of residents	*A dwelling or residential building should have private open space:* • *an area of 40sqm, with one part secluded at the side or rear with a min area of 25sqm, a min dimension of 3m and convenient access from a living room, or* • *a balcony of 8sqm with a min width of 1.6m and convenient access from a living room, or* • *a roof-top area of 10sqm with a min width of 2m and convenient access from a living room*	Yes	Each dwelling will be provided with direct access to private open space. The private open space provision is as follows: Dwelling 1 – a total of 70sqm of private open space located at the front of the property. With an additional 8.74sqm of secluded private open space provided through the first floor balcony. Dwelling 2 – a total of 40.2sqm of private open space, of which 24sqm will be secluded.

			Dwelling 3 – a total of 42.7sqm of private open space, of which 25sqm will be secluded. Dwelling 4 – a total of 40.3sqm of private open space, of which 25sqm will be secluded. Dwelling 5 – a total of 45.1sqm of private open space, of which 25sqm will be secluded.
55.05-5 Solar access to open space objective	**Standard B29**	**Met**	**Comments**
To allow solar access into the secluded private open space of new dwellings and residential buildings	*The private open space should be located on the north side of the dwelling or residential buildings*	Yes	The private open space for Dwellings 2, 3, 4 and 5 is located along the northern boundary of the site. Dwelling 1's private open space is located at the front of the site and will have an eastern orientation.
	The southern boundary of secluded private open space should be set back from any wall on the north of the space at least (2 + 0.9h) metres, where 'h' is the height of the wall Refer to Diagram B29	N/A	No southern secluded private open space is proposed.
55.05-6 Storage objective	**Standard B30**	**Met**	**Comments**
To provide adequate storage facilities for each dwelling	*Each dwelling should have convenient access to at least 6m^3 of externally accessible, secure storage space*	Yes	Each dwelling is provided with a storage shed with a volume of 6m3. Dwelling 1's storage is located within the garage. Dwelling 2, 3, 4 and 5's storage is located within each unit's private open space.

55.06-1 Design detail objective	**Standard B31**	**Met**	**Comments**
To encourage design detail that respects the existing or preferred neighbourhood character	*The design of buildings, including:* • *Facade articulation and detailing,* • *Window and door proportions,* • *Roof form, and* • *Verandahs, eaves and parapets,* *should respect the existing or preferred neighbourhood character.*	Yes	The proposal incorporates a pitched roof to all dwellings, which is consistent with the roof form of the local area.

			Dwelling 1, which fronts onto Park Street has been designed to feature a front porch / verandah, which is consistent with a number of dwellings in the street.
	Garages and carports should be visually compatible with the development and the existing or preferred neighbourhood character	Yes	Each dwelling features a garage which has been integrated into the development and will visually compatible with the host property.
55.06-2 Front fences objective	**Standard B32**	**Met**	**Comments**
To encourage front fence design that respects the existing or preferred neighbourhood character	*The design of front fences should complement the design of the dwelling and any front fences on adjoining properties*	N/A	No front fence to Park Street is proposed.
	A front fence within 3m of a street should not exceed: • *Streets in a Road Zone – 2m* • *Other Streets – 1.5m*	N/A	No front fence to Park Street is proposed.
55.06-3 Common property objective	**Standard B33**	**Met**	**Comments**
To ensure that communal open space, car parking, access lanes and site facilities are practical, attractive and easily maintained *To avoid future management difficulties in areas of common ownership*	*Developments should clearly delineate public, communal and private areas*	Yes	The proposal clearly delineates private areas (private open space) through use of fencing and landscaping. The proposal clearly delineates communal space (the shared accessway) with consistent materiality. No public areas are proposed.
	Common property, should be functional and capable of efficient management	Yes	The only common property proposed is the shared accessway which provides access to 4 of 5 dwellings. It will be functional and easily managed.
55.06-4 Site service objective	**Standard B34**	**Met**	**Comments**
To ensure that site services can be installed and easily maintained *To ensure that site facilities are accessible, adequate and attractive*	*The design and layout of dwellings and residential buildings should provide sufficient space (including easements where required) and facilities for services to be installed and maintained efficiently and economically*	Yes	The proposal plans clearly delineates a services space close to the site's frontage to Park Street. The proposal plans clearly show bin and recycling enclosures within the garage of Dwelling 1, and within the private open
	Bin and recycling enclosures, mailboxes and other site facilities should be adequate in size, durable, waterproof and blend in with the development	Yes	

	Bin and recycling enclosures should be located for convenient access	Yes	space of Dwellings 2, 3, 4 and 5. There is easy access to Park Street for collection. Mail boxes are proposed to be located together at the front of the property to ensure convenient access by Australian Post.
	Mailboxes should be provided and located for convenient access	Yes	

DRAWING REGISTER	
No-Rev.	***Name***
	COVER SHEET
100N	SITE CONTEXT-FEATURE SURVEY PLAN
110N	DESIGN RESPONSE
201N	GROUND FLOOR PLAN
202N	UPPER FLOOR PLAN
203N	ROOF PLAN
501N	ELEVATIONS SHEET 1
502N	ELEVATIONS SHEET 2
801N	SHADOW DIAGRAMS
802N	POS DIAGRAM

17 PARK STREET WENDOUREE

RE COUNCIL RFI ISSUE

COVER SHEET

8/10/2021

2021052TP

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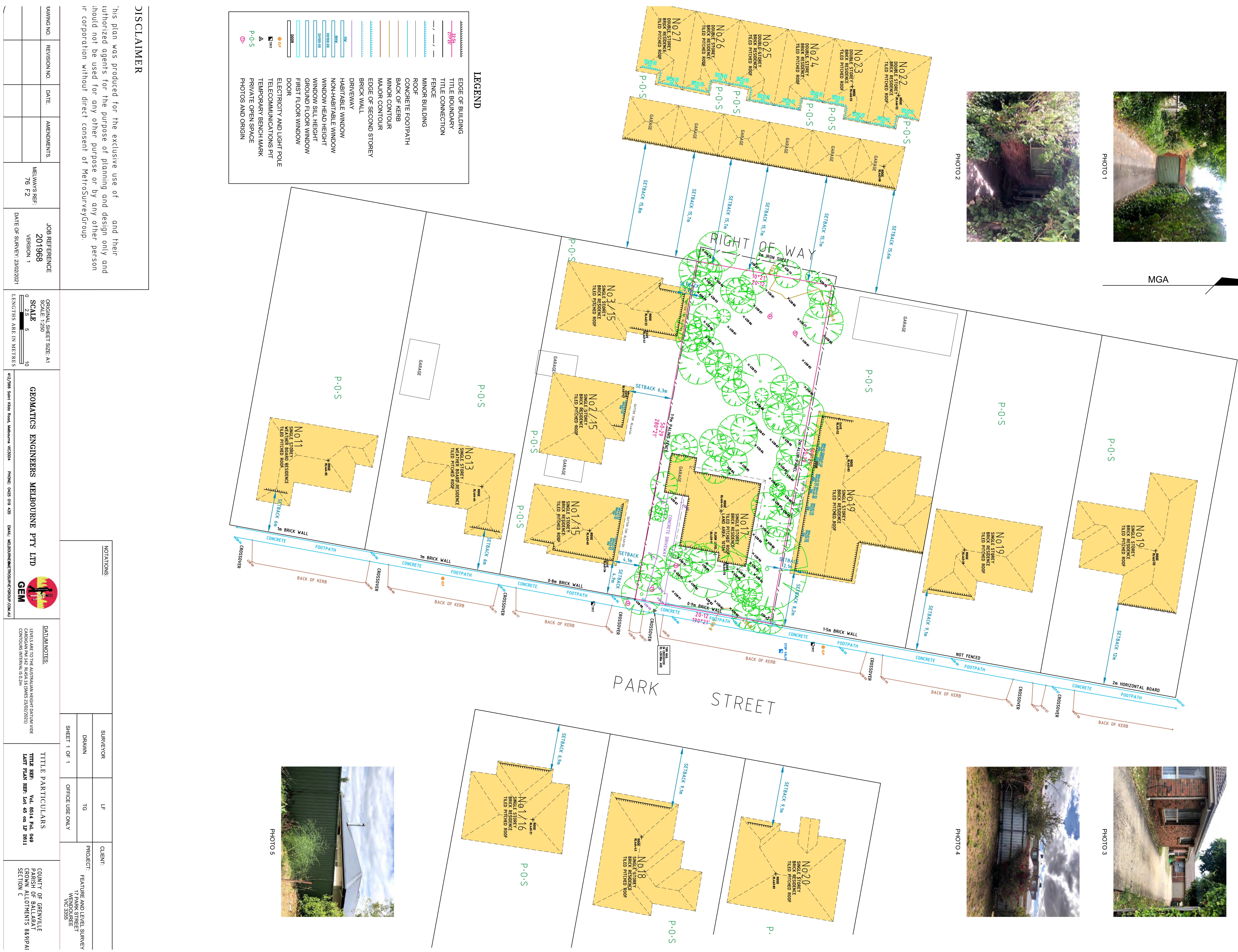

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17 PARK STREET WENDOUREE

RE COUNCIL RFI ISSUE

SITE CONTEXT-FEATURE SURVEY PLAN

8/10/2021

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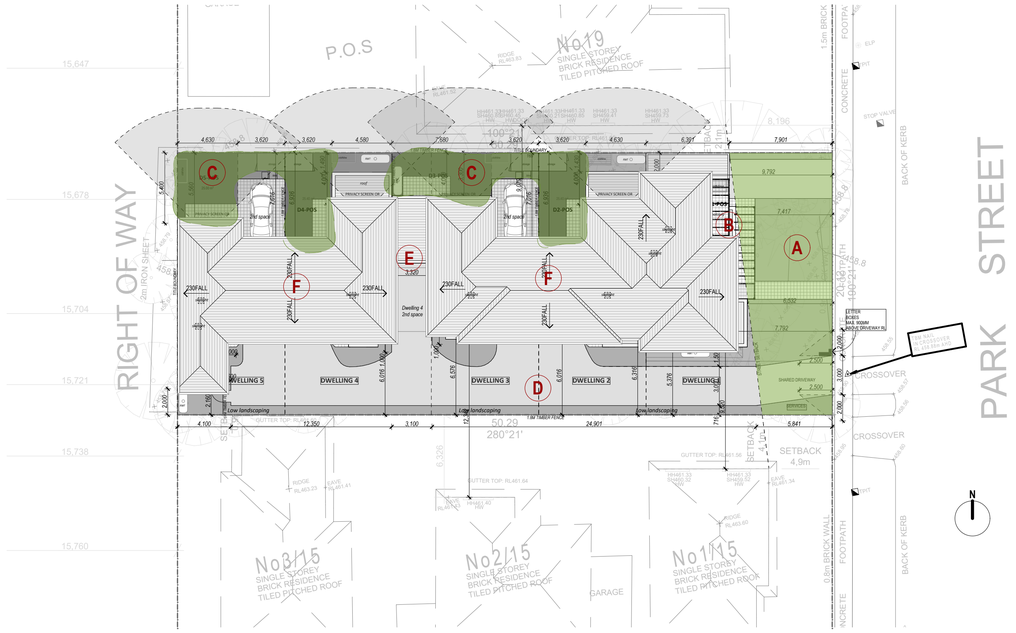

SITE PLAN

SOUTH ELEVATION

- **A** *Great front setback to meet planning requirement*
- **B** *Balcony and upper floor setback from Ground floor to reduce visual impact and create architecture features*
- **C** *P.O.S to be allocated on the Northern side to maximize solar access*
- **D** *Driveway to be allocated on the Southern side of the site to minimize shadow impact to the next door properties.*
- **E** *Separation between Dwelling 3 & 4 in upper level to reduce building bulk and visual impact*
- **F** *Traditional pitch roofs to respect existing site context and neighbourwood charactors.*

17 PARK STREET WENDOUREE

RE COUNCIL RFI ISSUE

DESIGN RESPONSE

8/10/2021

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DEVELOPMENT SUMMARY

SITE AREA:	1012M²
SITE COVERAGE:	44%
PERMEABILITY	24%
DWELLING QUANTITY:	5
DWELLING 1	**176M²**
GROUND	103M²
UPPER	73M²
DWELLING 2	**155M²**
GROUND	84M²
UPPER	71M²
DWELLING 3	**157M²**
GROUND	88M²
UPPER	69M²
DWELLING 4	**153M²**
GROUND	83M²
UPPER	70M²
DWELLING 5	**153M²**
GROUND	77M²
UPPER	76M²

NOTE:
** ALL ROOF AREAS TO BE CONNECTED TO RWTs*
** EACH DWELLING HAS 2500L RWT*
** RWTs CONNECT TO TOILETS AND LAUNDRIES*

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17 PARK STREET WENDOUREE

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GROUND FLOOR PLAN

8/10/2021

2021052TP201N

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17 PARK STREET WENDOUREE

RE COUNCIL RFI ISSUE

UPPER FLOOR PLAN

8/10/2021

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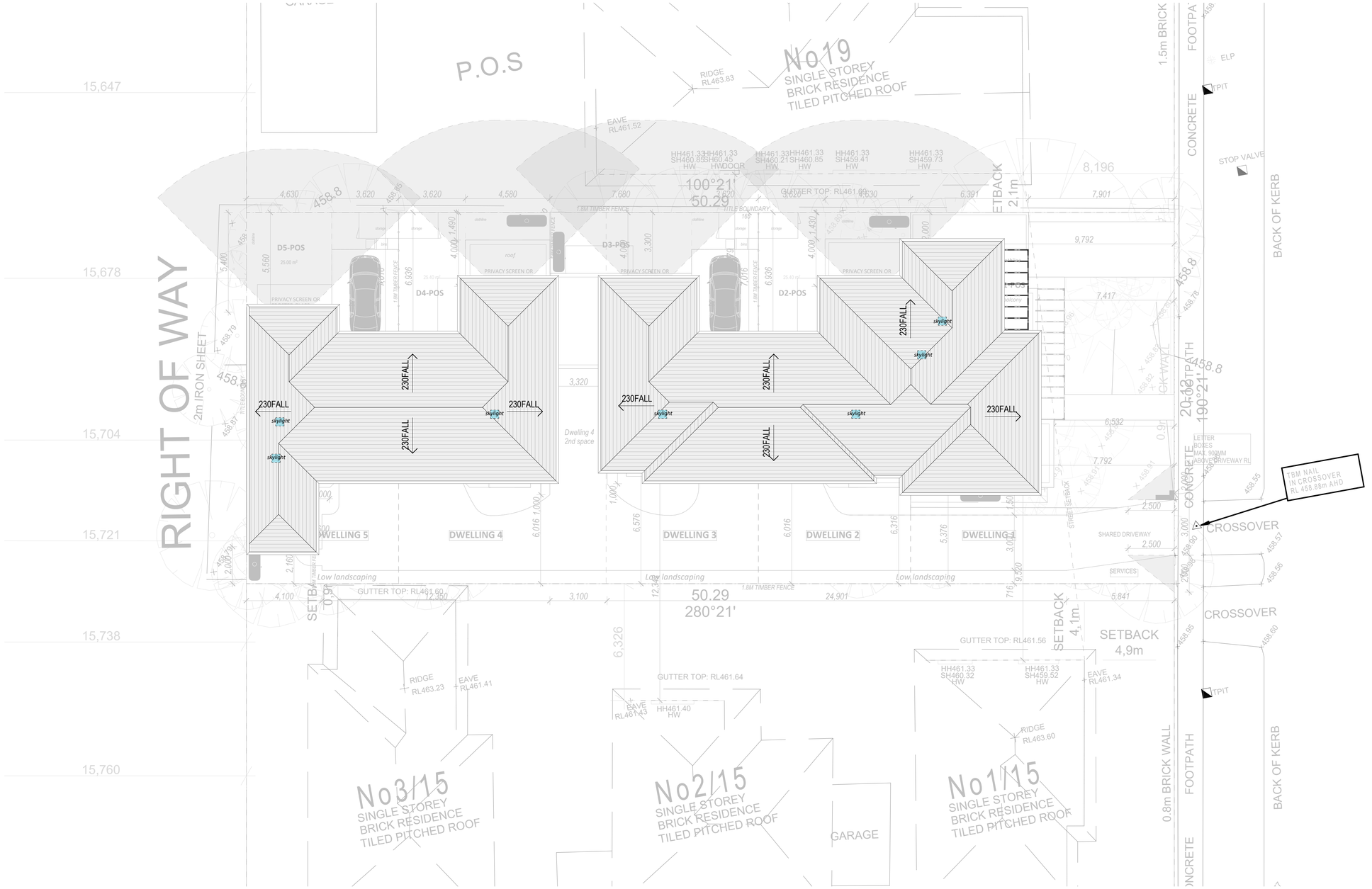

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ROOF PLAN

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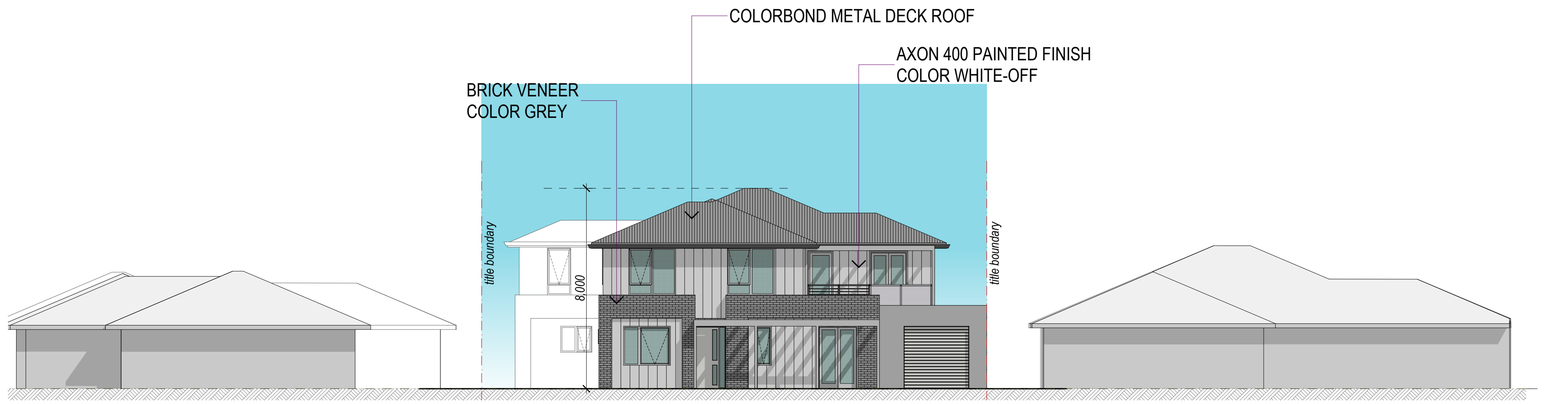

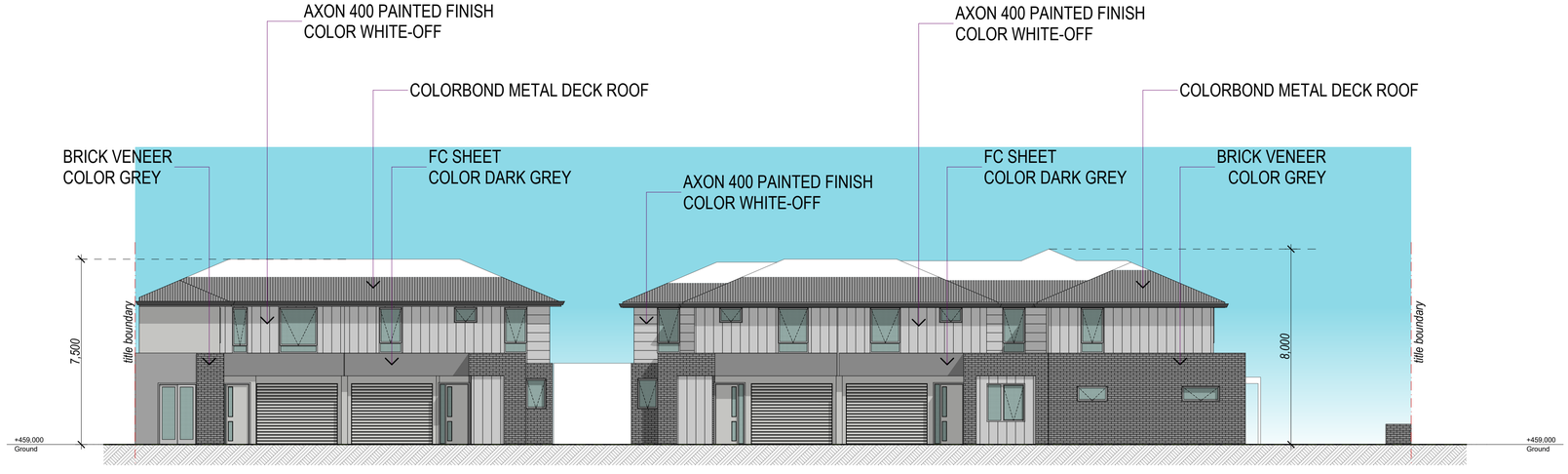

17 PARK STREET WENDOUREE

RE COUNCIL RFI ISSUE

ELEVATIONS SHEET 1

8/10/2021

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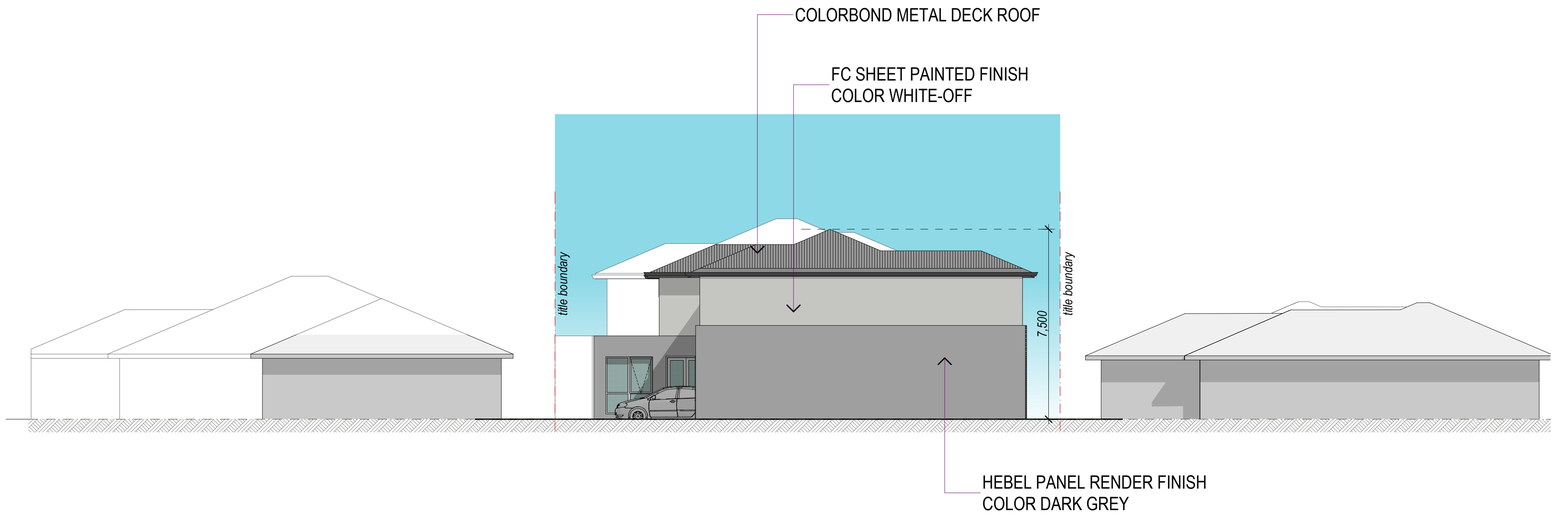

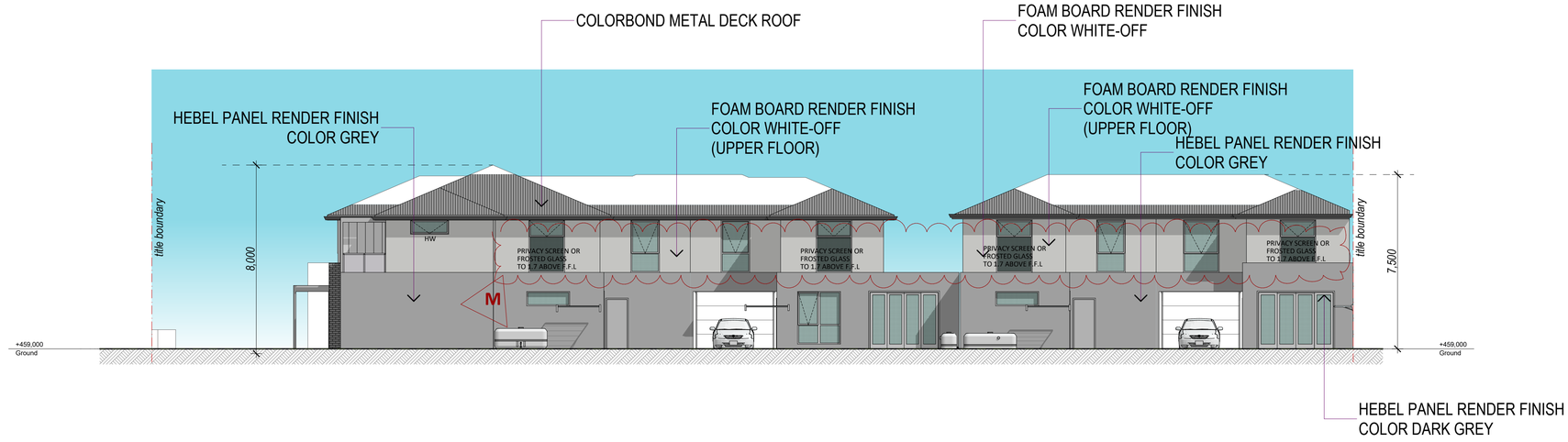

17 PARK STREET WENDOUREE

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ELEVATIONS SHEET 2

8/10/2021

2021052TP502N

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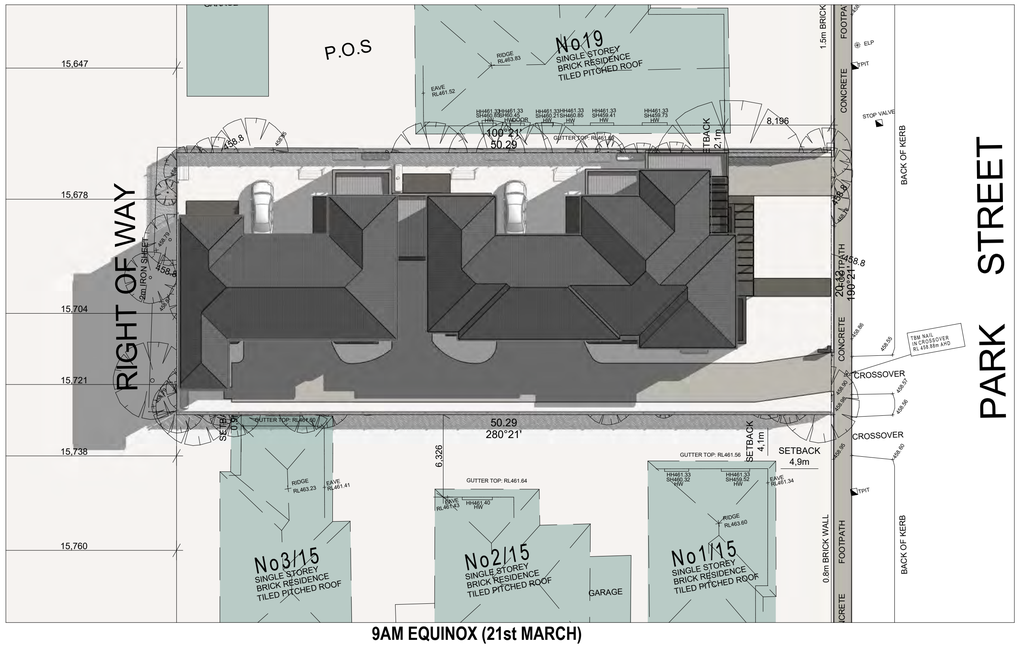

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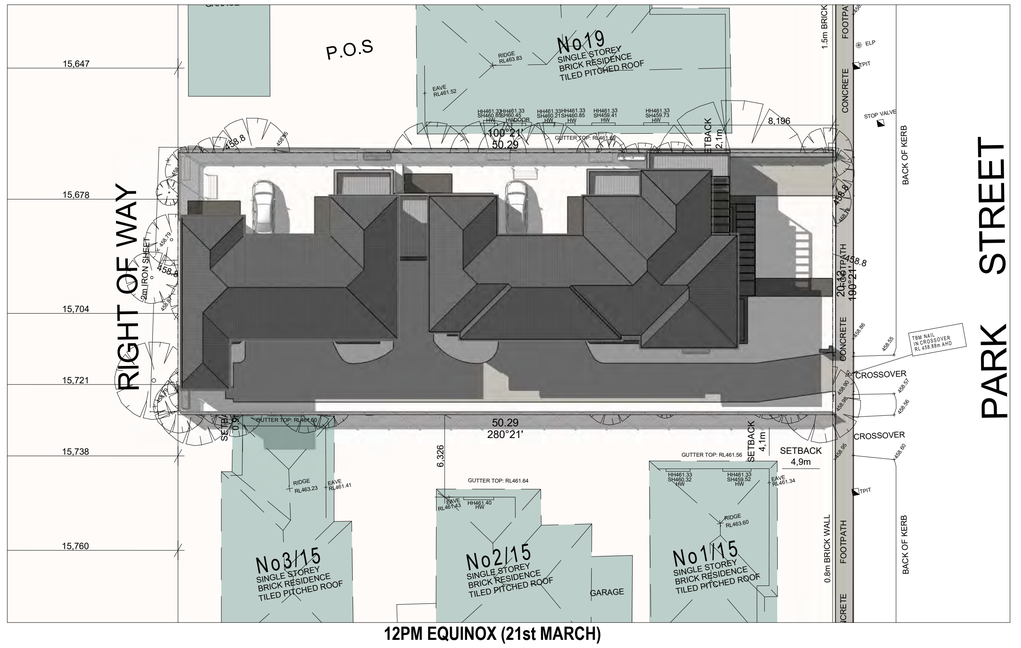

12PM EQUINOX (21st MARCH)

3PM EQUINOX (21st MARCH)

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17 PARK STREET WENDOUREE

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SHADOW DIAGRAMS

8/10/2021

2021052TP801N

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POS DIAGRAM

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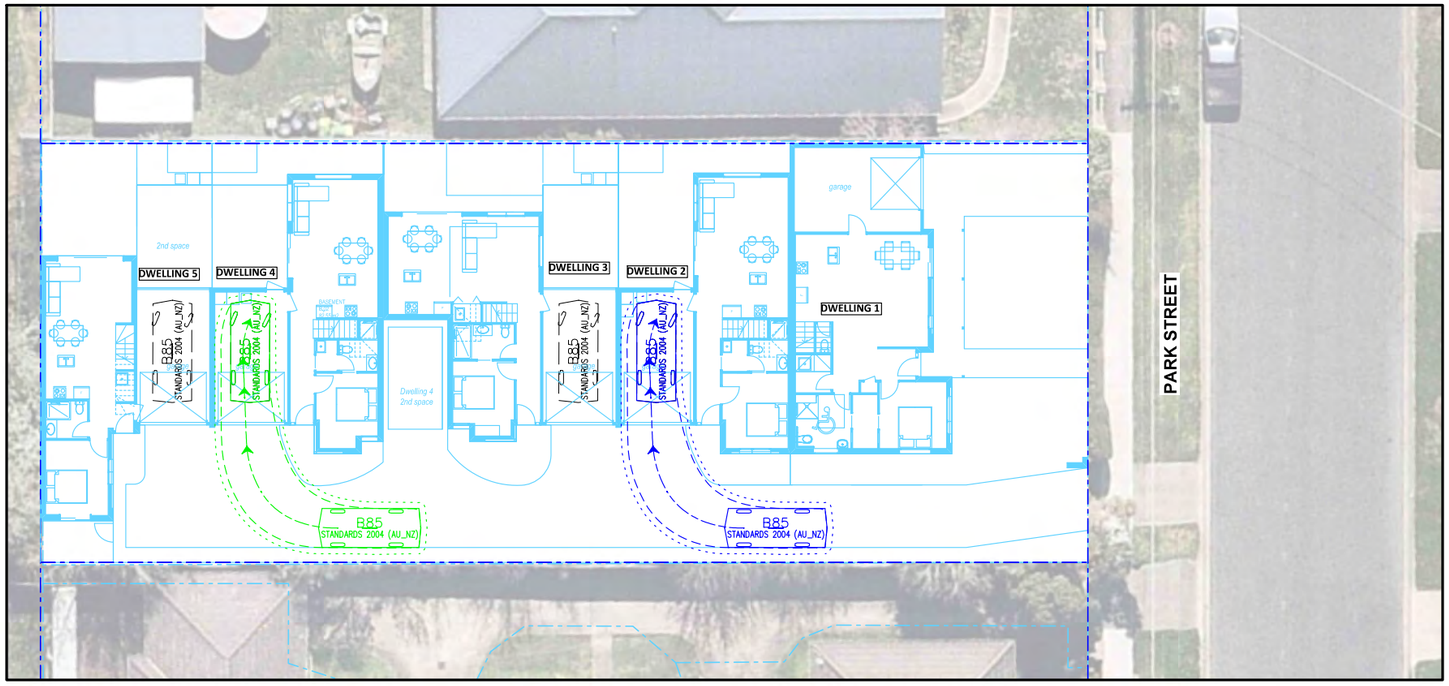

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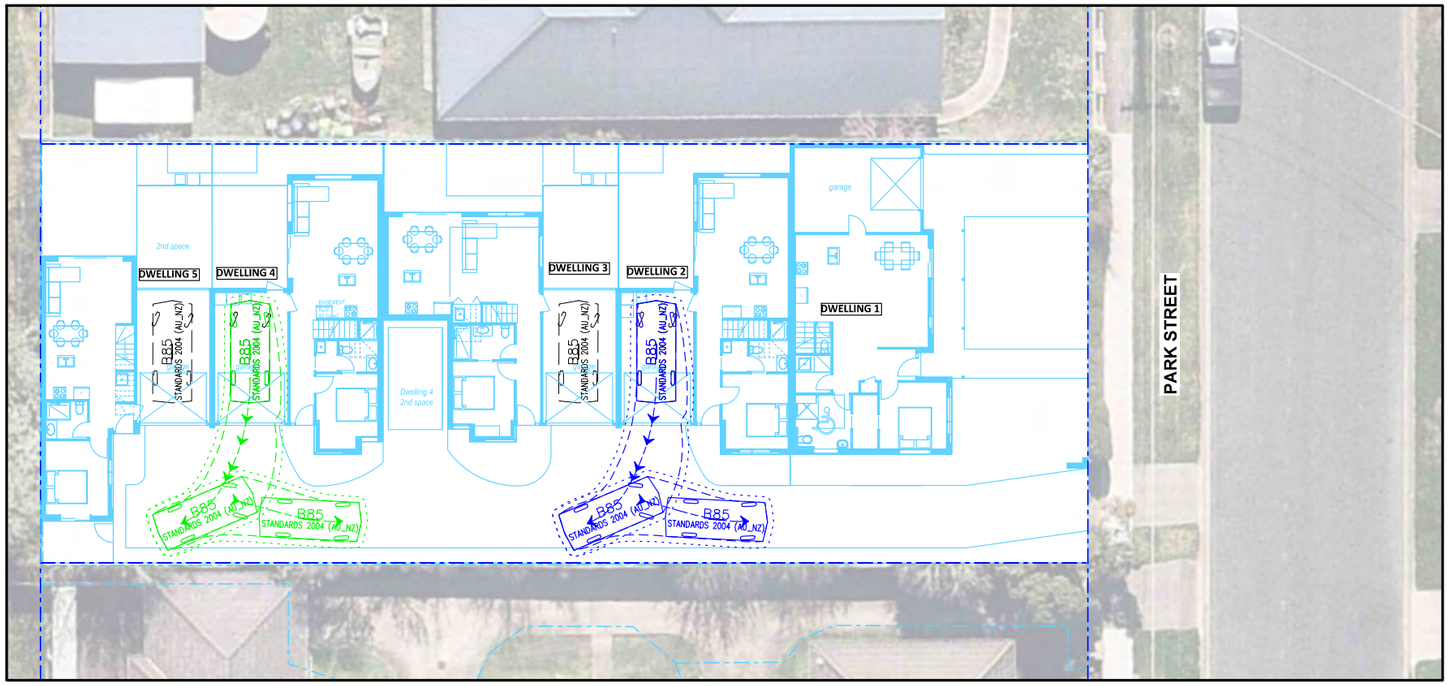

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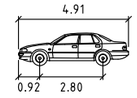

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Steering Angle	: 34.1

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Drawing Title
17 PARK STREET WENDOUREE
SITE VEHICLE ACCESS
SWEPT PATH ANALYSIS

Designed	Approved	Melway Ref
MOB	JS	565 S3

Scale 1:250 @ A3 (0 1.25 2.5 5)

Project Number	Drawing Number	Revision
210761	SPA100	B

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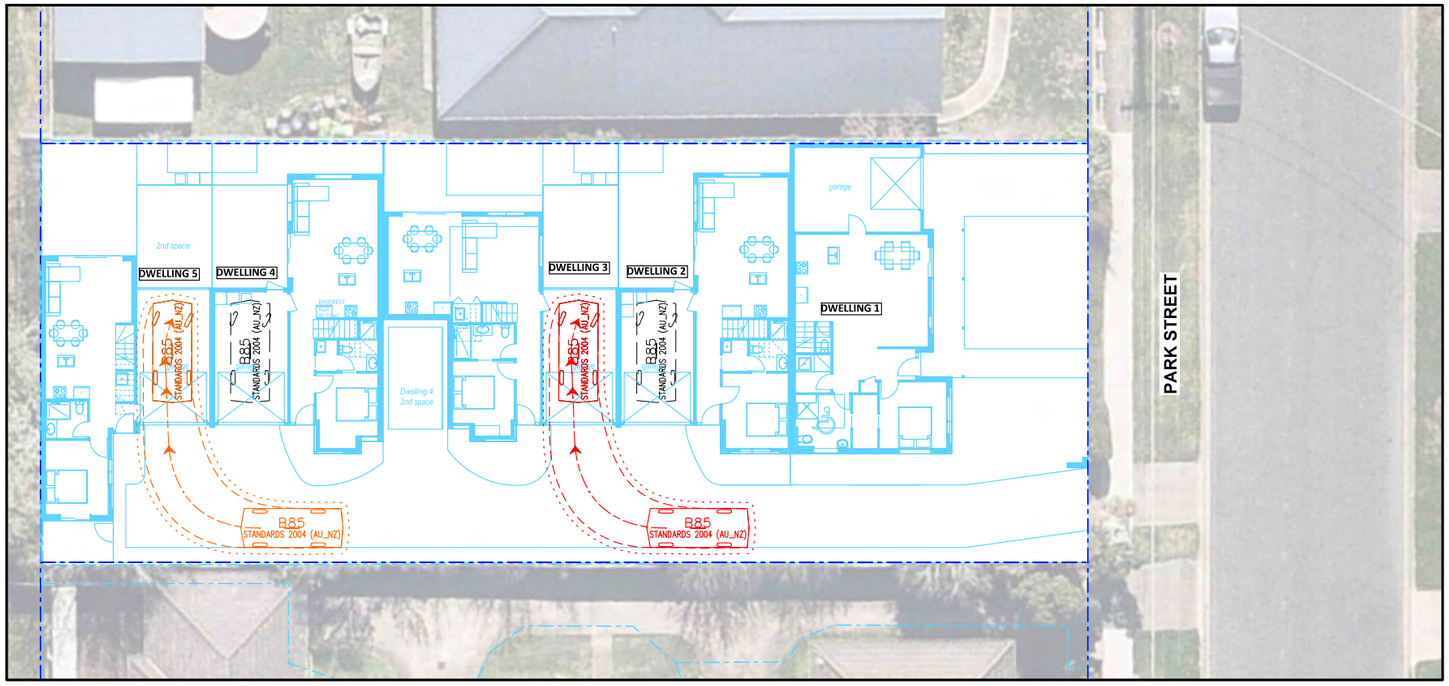

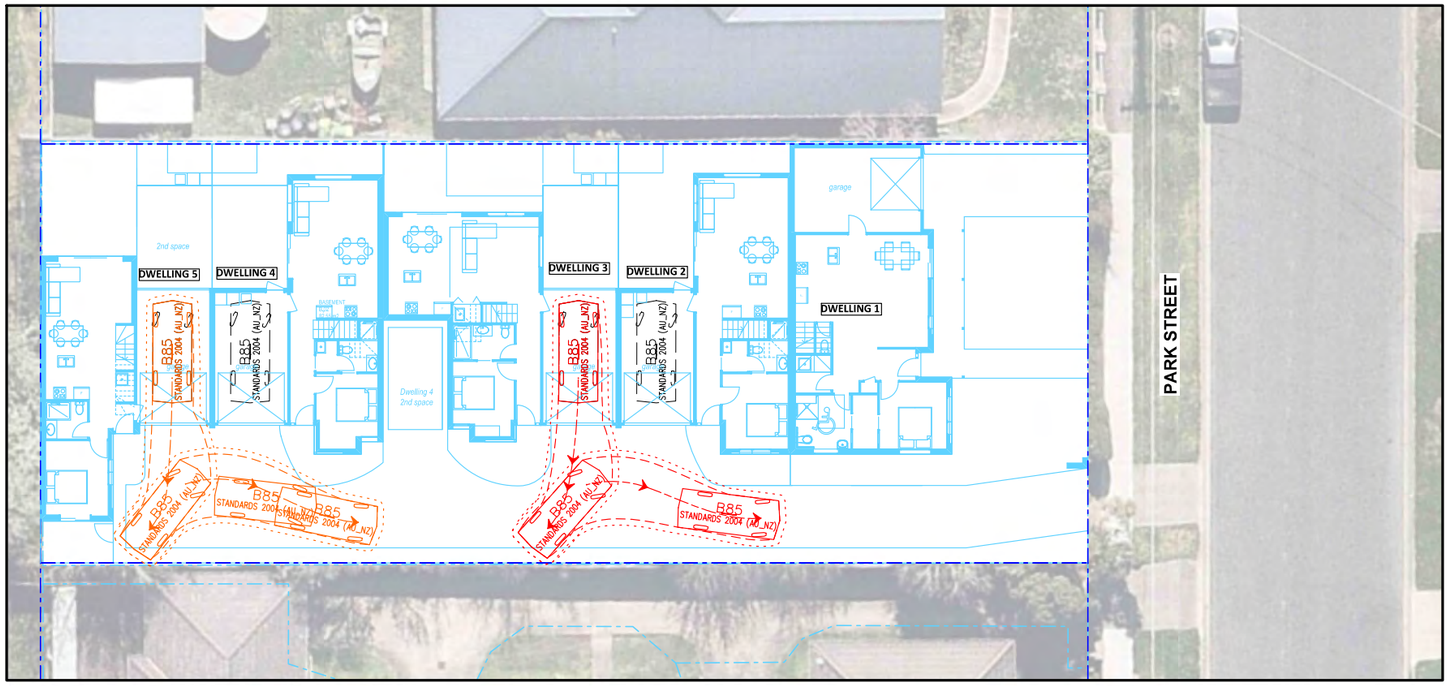

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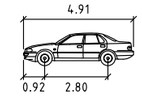

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Project Number	Drawing Number	Revision
210761	SPA101	B

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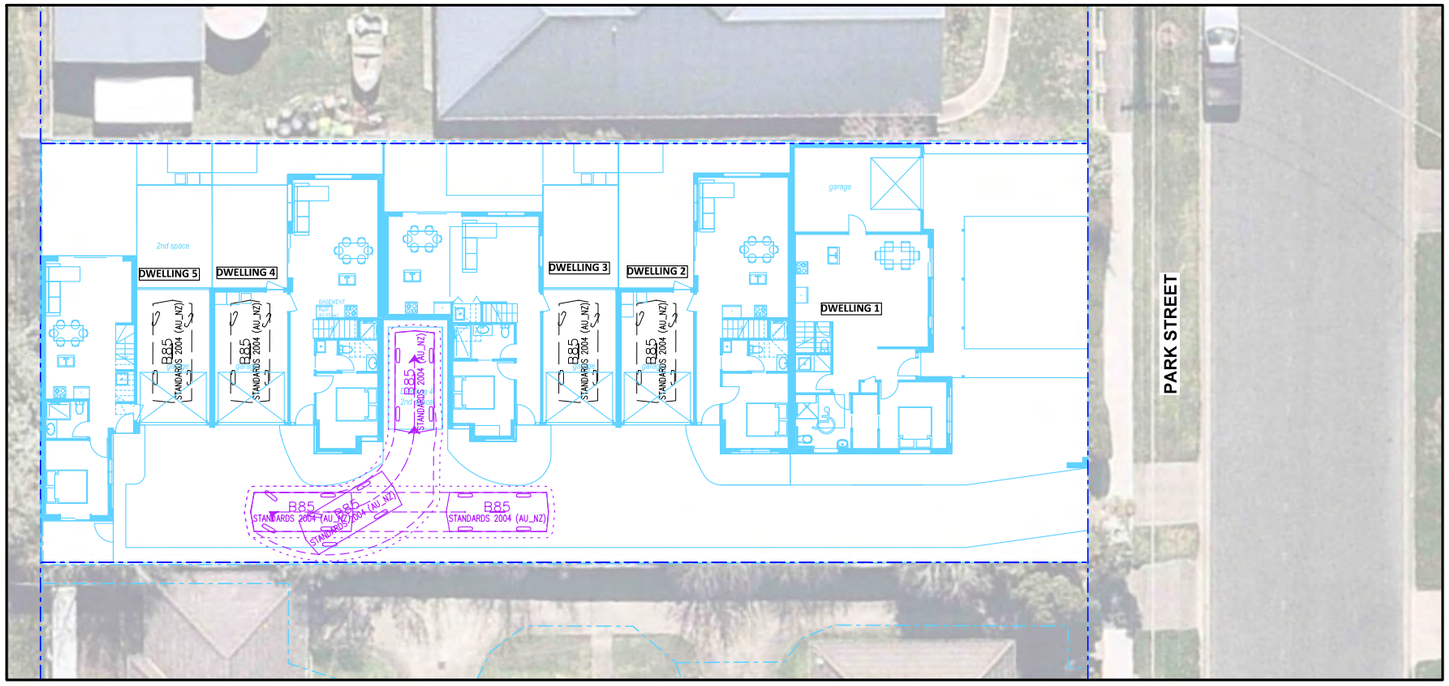

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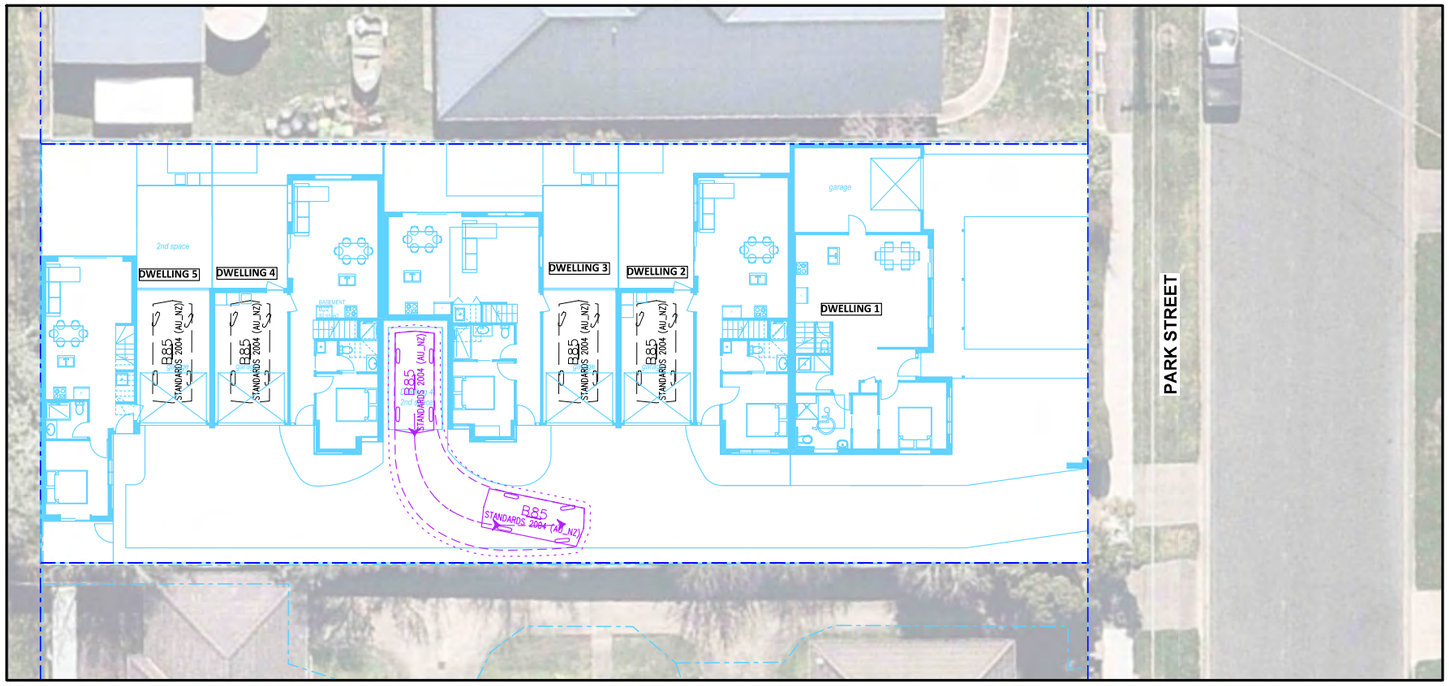

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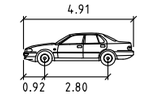

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SITE VEHICLE ACCESS
SWEPT PATH ANALYSIS

Designed	Approved	Melway Ref
MOB	JS	565 S3

Scale 1:250 @ A3 (0 1.25 2.5 5)

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210761	SPA102	B

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NOTES

1. TREE TRUNK DIAMETERS AND SPREADS SHOWN THUS (⊕) ARE SHOWN APPROXIMATELY TO SCALE.
2. THIS FEATURE AND LEVEL SURVEY HAS BEEN UNDERTAKEN FOR PLANNING AND DISCUSSION PURPOSES ONLY.
3. LAND IN SURVEY IS SHOWN ENCLOSED BY CONTINUOUS THICK LINES.
4. COORDINATES ARE ON A LOCAL PLANE DATUM BASED UPON TITLE BEARINGS.
5. ONLY VISIBLE SERVICES AT SURFACE LEVEL HAVE BEEN LOCATED.
6. PRIOR TO ANY DEMOLITION, EXCAVATION OR CONSTRUCTION ON THE SITE THE RELEVANT AUTHORITY SHOULD BE CONTACTED TO ASCERTAIN THE POSSIBLE LOCATIONS OF UNDERGROUND SERVICES AND DETAILED LOCATIONS OF ALL SERVICES.
7. ONLY WINDOWS DIRECTLY FACING THE SITE HAVE BEEN SHOWN ON THIS PLAN.
8. TBMs WERE PLACED ON 23/02/2021 AND WERE VERIFIED AT THE TIME OF PLACEMENT, VERIFICATION SHOULD BE CARRIED OUT BY SUITABLY QUALIFIED PERSONS BEFORE USE FOR CONSTRUCTION PURPOSES.
9. THIS PLAN IS ONLY TO BE USED FOR THE PURPOSE FOR WHICH IT HAS COMMISSIONED.
10. THIS IS NOT A TITLE RE-ESTABLISHMENT SURVEY.

PHOTO 1

PHOTO 2

PHOTO 3

PHOTO 4

PHOTO 5

MGA

No19
SINGLE STOREY
BRICK RESIDENCE
TILED PITCHED ROOF
RIDGE RL443.77

No22 DOUBLE STOREY BRICK RESIDENCE TILED PITCHED ROOF RIDGE RL446.52
No23 DOUBLE STOREY BRICK RESIDENCE TILED PITCHED ROOF RIDGE RL446.53
No24 DOUBLE STOREY BRICK RESIDENCE TILED PITCHED ROOF
No25 DOUBLE STOREY BRICK RESIDENCE TILED PITCHED ROOF
No26 DOUBLE STOREY BRICK RESIDENCE TILED PITCHED ROOF
No27 DOUBLE STOREY BRICK RESIDENCE TILED PITCHED ROOF
No3/15 SINGLE STOREY BRICK RESIDENCE TILED PITCHED ROOF RIDGE RL443.23 EAVE RL441.41
No2/15 SINGLE STOREY BRICK RESIDENCE TILED PITCHED ROOF EAVE RL443.43
No1/15 SINGLE STOREY BRICK RESIDENCE TILED PITCHED ROOF RIDGE RL443.60 EAVE RL441.34
No19 SINGLE STOREY BRICK RESIDENCE TILED PITCHED ROOF RIDGE RL443.83 EAVE RL441.52
No17 SINGLE STOREY BRICK RESIDENCE TILED PITCHED ROOF LAND AREA: 1012m² RIDGE RL444.44 FLOOR LEVEL RL439.11
No13 SINGLE STOREY WEATHER BOARD RESIDENCE TILED PITCHED ROOF RIDGE RL444.44
No11 SINGLE STOREY WEATHER BOARD RESIDENCE TILED PITCHED ROOF RIDGE RL441.85
No20 SINGLE STOREY BRICK RESIDENCE TILED PITCHED ROOF RIDGE RL443.82
No18 SINGLE STOREY BRICK RESIDENCE TILED PITCHED ROOF RIDGE RL444.43
No1/16 SINGLE STOREY BRICK RESIDENCE TILED PITCHED ROOF RIDGE RL445.21

P·O·S
GARAGE
SETBACK 12m
SETBACK 9,1m
SETBACK 15,6m
SETBACK 15,7m
SETBACK 15,8m
SETBACK 6,3m
SETBACK 4,1m
SETBACK 4,9m
SETBACK 8,2m
SETBACK 6m
SETBACK 9,1m
SETBACK 6,9m
RIGHT OF WAY
STREET
PARK
2m HORIZONTAL BOARD
1-5m BRICK WALL
0-9m BRICK WALL
1m BRICK WALL
1-9m PALING FENCE
2m ALUM PANEL
NOT FENCED
CONCRETE FOOTPATH
BACK OF KERB
CROSSOVER
CONCRETE DRIVEWAY
STOP VALVE
ELP
TPIT
TBM MAS IN CROSSOVER RL 450-88m AHD
GUTTER TOP: RL447.64
GUTTER TOP: RL447.54
GUTTER TOP: RL447.56
50-29 280°21'
20-12 190°21'
10°21 10°21

LEGEND

- EDGE OF BUILDING
- TITLE BOUNDARY (22·54 271°25')
- TITLE CONNECTION
- FENCE
- MINOR BUILDING
- ROOF
- CONCRETE FOOTPATH
- BACK OF KERB
- MINOR CONTOUR
- MAJOR CONTOUR
- EDGE OF SECOND STOREY
- BRICK WALL
- DRIVEWAY
- HABITABLE WINDOW (HW)
- NON-HABITABLE WINDOW (NHW)
- WINDOW HEAD HEIGHT (HH100-00)
- WINDOW SILL HEIGHT (SH100-00)
- GROUND FLOOR WINDOW
- FIRST FLOOR WINDOW
- DOOR (DOOR)
- ELECTRICITY AND LIGHT POLE (ELP)
- TELECOMMUNICATIONS PIT (TPIT)
- TEMPORARY BENCH MARK
- PRIVATE OPEN SPACE (P·O·S)
- PHOTOS AND ORIGIN (1)

DISCLAIMER

This plan was produced for the exclusive use of and their authorized agents for the purpose of planning and design only and should not be used for any other purpose or by any other person or corporation without direct consent of MetroSurveyGroup.

NOTATIONS:

SURVEYOR	LF	CLIENT:
DRAWN	TG	PROJECT: FEATURE AND LEVEL SURVEY 17 PARK STREET WENDOUREE VIC 3355
SHEET 1 OF 1	OFFICE USE ONLY	

DRAWING NO.	REVISION NO.	DATE.	AMENDMENTS.

MELWAYS REF: 76 F2

JOB REFERENCE 201968
VERSION 1
DATE OF SURVEY: 23/02/2021

ORIGINAL SHEET SIZE: A1
SCALE: 1:250
SCALE 0 2.5 5 10
LENGTHS ARE IN METRES

GEOMATICS ENGINEERS MELBOURNE PTY LTD
412/566 Saint Kilda Road, Melbourne VIC3004 PHONE: 0425 019 435 EMAIL: MELBOURNE@METROSURVEYGROUP.COM.AU

DATUM NOTES:
LEVELS ARE TO THE AUSTRALIAN HEIGHT DATUM VIDE CARDIGAN PM 142 RL454.16 (SMES 23/02/2021)
CONTOURS INTERVAL IS 0.2m

TITLE PARTICULARS
TITLE REF: Vol. 8514 Fol. 049
LAST PLAN REF: Lot 45 on LP 2611

COUNTY OF GRENVILLE
PARISH OF BALLARAT
CROWN ALLOTMENTS 8&9(PART)
SECTION C

Notice of Decision to Grant a Planning Permit:
That the delegated officer having caused notice of the application to be given under Section 52 of the *Planning and Environment Act 1987* and having considered all the matters required under Section 60 of the *Planning and Environment Act 1987* decides to Grant a Notice of Decision to Grant a Permit under the provisions of the Ballarat Planning Scheme, subject to the following conditions:

1. Amended Plans Required

   Before the use and/or development starts, amended plans to the satisfaction of the Responsible Authority must be submitted to and approved by the Responsible Authority. When approved, the plans will be endorsed and will form part of the permit. The plans must be drawn to scale with dimensions and emailed to info@ballarat.vic.gov.au with the planning reference number. The plans must be generally in accordance with the plans drawn by Life Design Architecture and dated 8/10/2021 but modified to show:

   (a) A landscape plan in accordance with Condition 2.

   Unless otherwise approved in writing by the Responsible Authority, all buildings and works are to be constructed and or undertaken in accordance with the endorsed plans to the satisfaction of the Responsible Authority prior to the commencement of the use.

2. Landscape Plan

   Prior to the commencement of any works, a landscape plan must be submitted to and approved by the Responsible Authority. When approved the plan will form part of the permit.

   The landscape plan must include:

   (a) a survey (including botanical names) of all existing vegetation to be retained and/or removed;
   (b) details of surface finishes of pathways and driveways;
   (c) a planting schedule of all proposed trees, shrubs and ground covers, including botanical names, common names, pot sizes, size at planting, sizes at maturity, and quantities of each plant.

   All landscaping works must be carried out in accordance with the approved l landscape plan and Council's Landscape Design Manual (August 2012).

3. Completion and Maintenance of Landscaping Works

Prior to the occupation of the buildings commencing all landscape works forming part of the approved Landscape Plans must be completed to the satisfaction of the Responsible Authority. The landscaping shown on the approved landscape plan must be maintained to the satisfaction of the Responsible Authority for 18 months from the practical completion of the landscaping. During this period, any dead, diseased or damaged plants or landscaped areas are to be repaired or replaced during the period of maintenance and must not be deferred until the completion of the maintenance period.

4. Tree Protection During Construction

Prior to the commencement of any works on site (including demolition):

(a) A tree protection fence to the satisfaction of the Responsible Authority must be erected around the street tree in front of 17 Park Street to define 'Tree Protection Zone; and

(b) The ground surface of the Tree Protection Zone within the fence must be covered by a 100mm deep layer of mulch, to the satisfaction of the Responsible Authority.

The Tree Protection Zone is to be established and maintained in accordance with Australian Standard AS4970 Protection of Trees on development sites.

5. Construction Management Plan

Prior to the commencement of works, a Construction Management Plan must be prepared to the satisfaction of the Responsible Authority and endorsed as part of this permit. The Plan must detail:

(a) Hours of demolition and construction to accord with Local Laws;
(b) Management of Park Street to ensure that it are kept free of parked or standing vehicles or any other obstruction, including building materials, equipment, etc. to maintain free vehicle passage to abutting benefitting properties at all times, unless with the written consent of the Responsible Authority;
(c) Methods to contain dust, dirt and mud within the site and the method and frequency of clean up procedures, including the management of on-site storage waste construction bins and vehicle washing;
(d) Management of parking of construction machinery and workers vehicles to prevent adverse impact on nearby properties
(e) Management of staging of heavy vehicles, site deliveries and unloading and lifting points with expected frequency, and traffic management in the vicinity, ensure routes to and from the site minimise disruption to residential properties
(f) Minimising disruption to pedestrian access along footpaths
(g) Measures to minimise noise and other amenity impacts from mechanical equipment, including idling trucks, and demolition/construction activities, especially outside of daytime hours
(h) The provision of adequate environmental awareness training for all on-site contractors and sub-contractors
(i) A liaison officer for contact by the public and the Responsible Authority in the event of relevant queries or problems experienced.

All works on the land must be undertaken in accordance with the endorsed Construction Management Plan to the satisfaction of the Responsible Authority.

6. Internal Access Ways and Car Parking

Prior to the occupation of the development, the areas set aside for the parking of vehicles and access lanes as shown on the approved plans must to the satisfaction of the Responsible Authority be:

(a) Constructed with a concrete pavement or flexible granular pavement with asphalt surfacing;
(b) Properly formed to such levels that they can be used in accordance with the plans;
(c) Drained;

Car spaces and access lanes must be maintained and kept available for these purposes at all times.

Prior to the occupation of the development, all works shall be completed in accordance with plans submitted to and approved by the Responsible Authority.

7. Naturestrips

Prior to the occupation of the development the naturestrip fronting the development shall be constructed in accordance with levels and specifications submitted to and approved by the Responsible Authority.

The works shall include:

(a) The reshaping of the naturestrip;
(b) Topdressing the area with a 75 millimetre rolled depth of good quality loamy topsoil free of any weed or seed;
(c) Seeding the area with an appropriate seed mix.

All works shall be completed in accordance with Council's Landscape Design Manual and shall be to the satisfaction of the Responsible Authority prior to the occupation of the development/ use hereby approved commencing.

8. Drainage Plans and Construction

Prior to works commencing on site, drainage, stormwater detention, stormwater treatment plans and computations must be submitted to and approved by the Responsible Authority. The drainage, stormwater detention, stormwater treatment plans and computations must accord with the Infrastructure Design Manual, Council's WSUD guidelines and Council's Site Stormwater Management Systems Policy.

All drainage works must be constructed in accordance with the approved plans and shall be completed to a standard satisfactory to the Responsible Authority prior to the occupation of the development/use hereby approved commencing.

At the completion of the works 'as constructed' civil plans shall be submitted to the Responsible Authority by a suitably experienced and qualified engineer.

Any proposed discharge of stormwater requiring a direct and/or modifying and existing connection to a designated waterway (as defined by the Water Act 1989) will require approval by the relevant Catchment Management Authority.

Any raingardens and rainwater tanks forming part of the approved drainage plans/system must be installed and maintained in good operational condition on an ongoing basis to the satisfaction of the Responsible Authority.

9. Vehicle Access

Prior to the commencement of the development, vehicle accesses to the site must be constructed in accordance with plans and specifications set under an approved Vehicle Crossing Permit to the satisfaction of the Responsible Authority.

Note: The construction or altering of a vehicle crossing, footpath and/or any other works or alterations within a road reserve or any other Council asset may require either a Crossover Permit (which includes a driveway and new crossover), a Road Opening Permit (ie. opening up a road for installation of infrastructure), Asset Protection Permit (Temporary Crossing Permit i.e. providing for temporary site access) or other approval to be obtained from the City of Ballarat. This Planning

Permit does not constitute such approval. Failure to obtain an appropriate permit or damaging Council infrastructure, including footpaths, kerbs, drains, street trees, nature strips etc or failing to remove redundant crossings and reinstate the kerb, drain, footpath, nature strip or other part of the road is a breach of the Ballarat City Council Community Local Laws (10 Penalty Units). For further information, please contact Council's Asset Protection Officer in relation to Road Opening or Asset Protection permits and Council's Infrastructure Planning & Development Unit via Council's Customer Service Officers and the Arborist relating to Street trees.

10. Contamination Assessment

Prior to works commencing on site and the issue of a Building Permit, a Preliminary Site Investigation Report prepared in accordance with AS4482.1-2005 shall be submitted to the Responsible Authority.

Should the Preliminary Site Investigation Report indicate that contaminating activities took place on the site or that contaminants are present, a Detailed Site Investigation in accordance with AS4482.1–2005 shall be undertaken. The Detailed Site Investigation report shall include any recommended remediation works.

If the report is accepted by the Responsible Authority, the remediation works shall be completed by the applicant to the satisfaction of the Responsible Authority prior to the occupation of the development/use hereby approved commencing.

If there are concerns about the nature and extent of the contamination found in the Preliminary and Detailed Site Investigation reports, the Responsible Authority reserves the right to require a statutory environmental audit to be undertaken. In this case either:

(a) A certificate of environmental audit shall be issued for the land in accordance with Part IXD of the Environment Protection Act 1970 prior to the occupation of the development/use hereby approved commencing; **OR**
(b) An environmental auditor appointed under the Environmental Protection Act 1970 must make a statement in accordance with Part IXD of that Act that the environmental conditions of the land are suitable for the intended use prior to the occupation of the development/use hereby approved commencing;

to the satisfaction of the Responsible Authority.

(c) Where a Statement of Environmental Audit is issued for the land, the development including subdivision hereby approved must comply with all the directions and conditions contained within the Statement.

(d) Where a Statement of Environmental Audit is issued for the land, prior to the issue of a Statement of Compliance for each stage, a letter prepared by an Environmental Auditor appointed under Section 53S of the Environment Protection Act 1970 or such other qualified person to the satisfaction of the Responsible Authority must be submitted to the Responsible Authority to verify that the directions and conditions contained within the statement have been satisfied.

(e) Unless otherwise approved in writing by the Responsible Authority, where a Statement of Environmental Audit is issued for the land, and any condition of that Statement requires any maintenance or monitoring of an ongoing nature, prior to the issue of a Statement of Compliance for any stage of the subdivision authorised by this permit, the permit holder must enter into an Agreement with the Responsible Authority pursuant to Section 173 of the Planning and Environment Act 1987. All costs associated with setting up the Agreement must be borne by the owner. The Agreement

must be registered on Title and run with the land, and must provide to the satisfaction of the Responsible Authority:

i. That the registered proprietor will undertake all required maintenance and/or monitoring in accordance with the statement.
ii. Prior to the development commencing, application must be made to the Registrar of Titles to Register the Section 173 Agreement on the title to the land under Section 181 of the Planning and Environment Act 1987.

11. Sediment on Roadways

No material shall be deposited on any road external to the site by any means including construction vehicles or associated plant entering or leaving the land subject to this permit. Any material deposited on the road shall be removed by mechanical or manual means to the satisfaction of the Responsible Authority.

Note 1: Depositing such material on Responsible Authority's Roads is an offence under the Environment Protection (Resource Efficiency) Act 1970 and penalties may apply.

Note 2: Any costs associated with a clean up of road surfaces borne by the Responsible Authority must be met by the permit holder.

12. Section 173 Agreement

If for the purpose of meeting On-Site Stormwater Detention (OSD) and/or Water Sensitive Urban Design (WSUD) requirements rainwater tanks are proposed, and if rainwater tanks are approved for such use by the Responsible Authority, then;

Prior to the occupation of the development commencing (including the issue of Certificate of Occupancy), an Agreement pursuant to Section 173 of the *Planning & Environment Act 1987* shall be entered into between the owner and the Responsible Authority. The Agreement shall be prepared and registered on the Certificate of Title of the subject land, requiring the owner to install and maintain a rainwater tank as a designated OSD/WSUD system in a condition and to a standard that ensures its correct operation and otherwise to the satisfaction of the Responsible Authority.

Prior to the occupation of the development commencing (including the issue of Certificate of Occupancy), an application must be made to the Register of Titles to register the Section 173 agreement on the title to the land under section 181 of the Act. The responsible authority will not allow occupation of the development until the agreement has been registered at the titles office and a dealing number assigned confirming that the agreement has been registered.

The Responsible Authority may release the owner from these obligations and/or vary the requirements upon the written request of the owner. The Responsible Authority must be satisfied that the release and/or variation to the agreement will result in a better planning outcome or that the agreement is no longer required.

All costs associated with the preparation, signing, lodgement, registration, amending and ending of the Agreement must be borne by the owner, including all notification costs and legal fees.

13. Permit Expiry - Development Only

This permit will expire if one of the following circumstances applies:

(a) The development is not started within two years of the date of this permit;
(b) The development is not completed within four years of the date of this permit.

The responsible authority may extend the periods referred to if a request is made in writing before the permit expires or within six months afterwards (for a request to extend the time to commence the development) or twelve months after the permit expires (for a request to extend the time to complete the development).

Notes:

Building Approvals

This permit does not constitute any authority to carry out any building works or occupy the building or part of the building unless all relevant building permits are obtained. The works hereby approved must accord with the requirements of the *Building Act 1993*, *Building Regulations 2018* and *Building Code of Australia 2019*.

ResCode

ResCode has been assessed as part of this planning application

Containment of Refuse and Disposal of Builders' Refuse

Under the provisions of the Ballarat City Council Community Local Law 2017 an on-site facility for containment of all builders' refuse is required to be provided on any land where any building work within the meaning of the Building Act 1993 is being carried out. The local law contains specific provisions about the type and location of refuse containment facilities and the emptying and removal of such facilities.

6.2. PLP2019/546 LOT 1 HEINZ LANE, INVERMAY PARK

Division: Development and Growth
Director: Natalie Robertson
Author/Position: Katy Baker – Coordinator Statutory Planning

PURPOSE

1. The purpose of this report is to determine a position on Planning Permit Application PLP/2019/546.

BACKGROUND

DATE RECEIVED	15 August 2019, plans amended 18 December 2020, additional acoustic report supplied 24 March 2021.
PROPERTY ADDRESS	Lot A Heinz Lane, INVERMAY PARK VIC 3350
APPLICANT	Cardno TGM
PROPOSAL	Staged multi lot subdivision
ZONES	General Residential Zone, Schedule 1 (GRZ1) Industrial 1 Zone (IN1Z) (part only Bogong Avenue) Transport Zone 1 – State Transport Infrastructure (TRZ1). Western Freeway, adjoining site to the north.
OVERLAY/S	None affecting the subject site.
PERMIT TRIGGERS	Clause 32.08-3, Subdivision of Land (GRZ)
RESTRICVITE COVENANTS	N/A
CURRENT USE / DEVELOPMENT	Vacant
CULTURAL HERITAGE MANAGEMENT PLAN	Yes. CHMP no. 15765, approved 23rd November 2018.
SUBMISSIONS	5 objections, 1 withdrawn

Proposal

2. This application has been formally amended under Section 57A of the *Planning and Environment Act 1987.* The amended application replaces the original. This assessment is based upon the amended plans.

3. The applicant seeks approval to subdivide land into 80 lots.

   - The proposal includes the construction of roads and the provision of public open space.
   - Stage 1, being lots 1 to 33 has already been approved under planning permit PLP/2018/251.

- The proposal under PLP/2019/546, includes Stages 2, 3 and 4.
- Stage 2 comprises 28 lots.
- Stage 3 comprises 27 lots, and;
- Stage 4 comprises 25 lots.
- The proposed lots vary in size from 413sqm to 934sqm.
- Access is proposed via a connection in the south-east corner to Wellard Boulevard, which forms part of PLP/2018/251, with the eastern section of the site accessed via Bogong Avenue.
- The proposal was amended during the assessment timeframe. The original subdivision plan (submitted in 2019) comprised 78 lots to be delivered in two stages. The original subdivision pattern was very similar to the revised subdivision pattern (as submitted in 2020), in terms of lot layout and road configuration. The key changes included removing two parcels of land (owned by Council and Powercor) from the site boundary, reducing the proposed lot sizes, and providing two additional lots.

Image 1: Proposed Subdivision. Source: Application documents.

Subject site and locality

4. The subject site includes three lots located in Invermay Park within Ballarat. The Site specifically excludes a parcel of Council owned land on the western boundary with an area of 2420sqm, as well as a small parcel of land owned by Powercor, with an area of 52sqm located on the eastern boundary.

5. The Site is currently vacant, has an irregular configuration and comprises an area of approximately 7.7ha (Image 2 below). The Western Freeway is located directly north of the site, with rural land beyond it. The Mildura railway line and associated rail reserve runs along the western boundary of the site. Land to the west of the site (beyond the railway line) is industrial zoned, and comprises industrial land uses, as well as warehouses. There is an existing Boral Asphalt facility approximately 120m to the northwest of the site. To the east is the established residential area of Invermay Park (Image 2 and 3 below). Stage A of the proposed multi-stage subdivision (as identified in Figure 1 above) is located directly south of the site. Dwellings have been constructed on most but not all of the 33 lots created in Stage A. Heinz Lane is located further south, and the Midlands Golf Club is located to the south and south-east of the site. The Selkirk Brick Quarry and manufacturing plant is 900 metres to south of the site.

6. Access to the site is from Bogong Avenue in the east and Heinz Lane in the south. The site is relatively flat, sloping from an AOD of 448 in the north-eastern corner down to an AOD of 443 in the south-western corner. Aerial imagery indicates there is a pond or other body of water located along the eastern property boundary. Much of the site is clear of mature vegetation, however, there are several patches of mature vegetation located in the north of the site, centrally within the site, and along the south-western boundary (Figure 4).

Image 2: Site Location (shown in red), with excluded Council owned land (shown in blue) and Powercor land (shown in green), with the surrounding area including the Boral Asphalt Facility (shown in orange)

Image 3: Views of nearby industrial uses from within the Site

Image 4: Existing Vegetation in the Site

Planning Permit History

7. The following planning permits are relevant to the proposal:
    - PLP/2018/251 - Lot A Heinz Lane, INVERMAY PARK VIC 3350 – Delegated Permit – 12/08/2019.

Public notification

8. 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; and
    - Placing a sign on site.

Submissions

9. Following the notification period, five objections were received.

10. One objection was withdrawn following discussion with the applicant.

11. The concerns of objectors are summarised as follows:
    - Flood rate from the subject site not appropriately mitigated.
    - Impact on residents by existing industrial noise, currently businesses may operate 24 hours.

Referrals

12. The following external referrals were undertaken:

Authority	Advice	Report Response
Central Highlands Water	Does not object to the granting of any permit that may issue subject to the provided conditions.	Conditions will be included within the recommendation.
Powercor	Does not object to the issue of a planning permit for the application subject to the provided conditions.	Conditions will be included within the recommendation.
Transport Victoria	Does not object to the grant of a planning permit subject to the provided conditions.	Conditions will be included within the recommendation.
VicRoads	VicRoads has considered the application and in principle has no objection to the proposal.	No comment.
Environmental Protection Authority	Throughout the assessment period, the EPA and applicant have undergone several RFI processes. EPA have provided conditions, noting the provided reports remain limited in their technical review.	The Council has undertaken a peer review of the materials submitted by the applicant and is satisfied the proposal would be acceptable in terms of air, noise and odour impacts, with appropriate mitigation measures. Conditions will be included within the recommendation.

13. The following internal referrals have been undertaken:

Department	Advice	Report Response
Traffic and Transport	The following comments were submitted by the Traffic & Transport Section regarding a proposed staged multi-lot plan of subdivision of Lot 1 Heinz Lane, Invermay Park. Notice of the referral was received on 12 September 2019. The total development site consisting of five titles with a 137m frontage to the north side of Heinz Lane is predominantly in the General Residential Zone. The predominantly cleared regular shaped site is currently used as a golf driving range by the Midlands Golf Club. Heinz Lane is a sealed link road with concrete kerb and channel and grass nature strip. The Ballarat Maryborough rail line runs along the western boundary of the site. A planning permit was issued for Stage A of the development (2018/251) including two titles fronting Heinz Lane and involving 33 lots. This application for Stages B1 & B2 involves an extension of the residential development to the rear of Stage A and includes a further 78 lots varying in size from 525sqm to 1139sqm. The plan of subdivision also includes three reserves measuring 1,236sqm, 2,420sqm and 4,039sqm, two of which run along the railway reserve and the other adjacent to the golf links. A small portion of the development is within the public Use Zone and the Industrial 1 Zone however these areas are incorporated within reserves. A Traffic Impact Assessment was prepared by a suitably qualified traffic consultant in support of the application when Stage A was submitted. The traffic assessment has projected volumes based on the full development which extends north of Bogong Avenue to the boundary with the Western Freeway including the total development of 111 lots. Site Access / Traffic Flow Under the provisions of Clause 65.02 Council must consider the layout of roads having regard to their function and relationship to existing roads and the movement of pedestrians and vehicles throughout the subdivision and the ease of access to all lots before deciding on an application. A new internal road network will service the proposed lots with lot frontages between 14m and 20m. Footpaths are to be constructed abutting all lot frontages. Road reserve widths vary between 16m and 20m. A 16m wide reserve adjacent to a reserve is considered appropriate for an access road however a minimum of 18m width, in line with council IDM published policy, is considered appropriate where lots front both sides of the road. Officers did not support narrower road reserves in Stage A and continue to hold that view. One such 16m reserve is proposed running east/west in the continuation of Wedge Circuit immediately north of Stage A. All other reserve widths in Stage B comply with the policy. It is noted that some 16m road reserve widths received approval in Stage A. To cater for future public bus routes, it was recommended that intersections along the route connecting Heinz Lane to Bogong Avenue be designed to accommodate bus turning movements. Such a bus route supports the need for a collector road pavement profile. All road design profiles should be to the approval of Council's Engineering Development Department.	The road layout and dimensions have not been amended adequately between the original two stage subdivision plan (2019) and revised three stage subdivision plan (2020), comments from the Traffic and Transport team remain outstanding. Issues associated with internal road width to be mitigated by condition, with any accessway proposed at 16m, to become 18m.

Engineering	Consent granted, with provision of conditions.	Conditions will be included within the recommendation.
Design and Survey	Entrance into subdivision will be constructed as per civil design plans.	No comment.
Vegetation	The Planning Department received the following comments from colleagues regarding vegetation: Location 1 is a patch of native vegetation as described in the Native Vegetation Assessment compiled by Mark Trengove Ecological Services. It is located within the boundaries of a proposed reserve (Stage B1) and it would be preferred to try and retain these trees. The planting along the west boundary of the development acts as a good barrier to the train line and the industrial area on the other side of the train line. In particular this line of tree creates a visual sight barrier to the industry. Although these species of trees (Eucalyptus globulus var compacta, Compact Blue Gum) are not always the best trees to plant, they are semi mature and provide some benefits. With work done to these trees they could be retained and benefited from. I would like to see the patch of vegetation in the far North East corner also retained at it is situated along the boundary and provides a sight and noise screen. It would be good to see a street tree plan for the whole development and a proposed planting plan for the reserves especially the reserve along the east boundary of Stage B2. Suitable trees in this reserve to also create a barrier would be good. A planning permit will be required to remove any native vegetation under 52.17.	Whilst comments regarding vegetation are noted, it is understood that the removal of vegetation on Site is exempt in accordance with the table to Clause 52.17-7. Specifically, the only native vegetation proposed to be removed is located in the central western part of the site and is less than 10 years old and has naturally established. As such, it would be exempt from permit.

Officer direct or indirect interest

14. No officer involved in the preparation of this report has declared a conflict of interest.

Planning Policy Framework

15. The following policies are relevant to the consideration of this application:

- Clause 11.01 – Victoria
  - Clause 11.01-1S – Settlement
  - Clause 11.01-1R – Settlement: Central Highlands
- Clause 11.02 – Managing Growth
  - Clause 11.02-1S – Supply of Urban Land
- Clause 12.01 – Biodiversity
  - Clause 12.01-1S – Protection of Biodiversity
  - Clause 12.01-2S – Native Vegetation Management
  - Clause 12.03-1S – River corridors, waterways, lakes and wetlands
  - Clause 12.05–2S – Landscapes
- Clause 13.02 – Bushfire
  - Clause 13.02-1S – Bushfire Planning
- Clause 13.04 – Soil Degradation
  - Clause 13.04-1S – Contaminated and Potentially Contaminated Land
- Clause 13.05 – Noise
  - Clause 13.05-1S – Noise Abatement
- Clause 13.06 – Air
  - Clause 13.06-1S – Air Quality Management
- Clause 13.07 – Amenity and Safety
  - Clause 13.07-1S – Land Use Compatibility
  - Clause 13.07-2S – Major Hazard Facilities

- Clause 15.01 – Built Environment
  - Clause 15.01-1S – Urban design
  - Clause 15.01-3S – Subdivision Design
  - Clause 15.01-4S – Healthy Neighbourhoods
  - Clause 15.01-5S – Neighbourhood Character
- Clause 15.03 – Heritage
  - Clause 15.03 – 2S – Aboriginal Cultural Heritage
- Clause 16.01-2S – Residential Development
  - Clause 16.01-001S – Housing Supply
- Clause 18.02 – Movement
  - Clause 18.02-1S – Walking
  - Clause 18.02-2S – Cycling
  - Clause 18.02-4S – Roads
- Clause 19.02 – Community Infrastructure
  - Clause 19.02-6S – Open Space
- Clause 19.03 – Development Infrastructure
  - Clause 19.03-3S – Integrated Water Management
- Clause 21 – Municipal Strategic Statement
  - Clause 21.01 – Municipal Overview
  - Clause 21.02 – Settlement and Housing
  - Clause 21.03 – Environmental and landscape values
  - Clause 21.06 - Built form, heritage and design

16. The relevant planning policy framework is discussed in the Key Issues section of this Report.

Zone

17. The site is predominantly located within the General Residential Zone – Schedule 1 (GRZ1). A small part of the site (along the western boundary in the south of the site) is located within the Transport Zone (TRZ1), and an even smaller part of the site is located in the Industrial 1 Zone (IN1Z). It is understood that this is a mapping anomaly. The proposed lots, roads and reserve will be located wholly within the GRZ1.

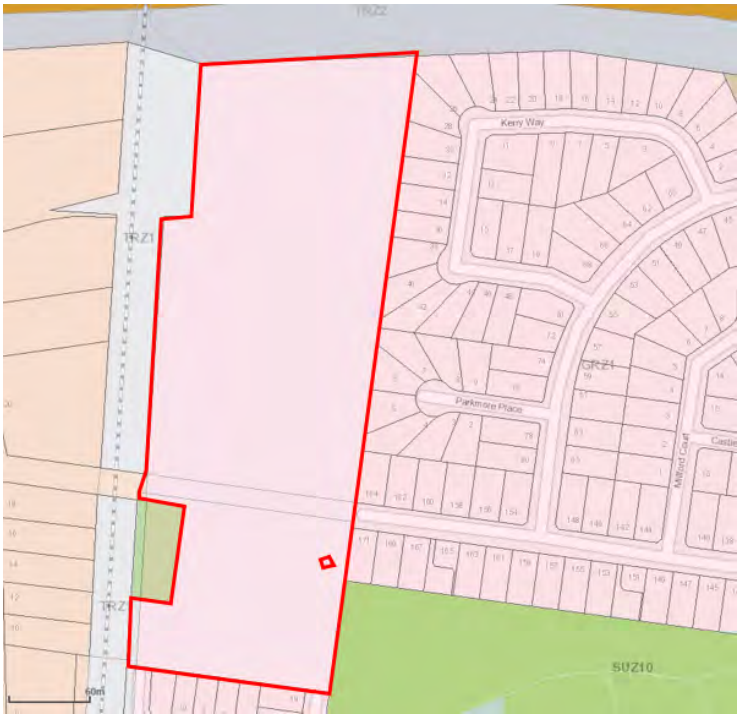


Image 6: Zoning Map

18. The purpose of the GRZ1 is:
    - To implement the Municipal Planning Strategy and the Planning Policy Framework.
    - To encourage development that respects the neighbourhood character of the area.
    - To encourage a diversity of housing types and housing growth particularly in locations offering good access to services and transport.
    - To allow educational, recreational, religious, community and a limited range of other non-residential uses to serve local community needs in appropriate locations

19. The application seeks to create 80 additional lots, which will facilitate housing growth. The proposed lots vary in size from 413sqm to 934sqm., which will encourage housing diversity. These lots will be comparable in size to those contained within the established residential area to the east, and as such, the subdivision is considered to respect the existing neighbourhood character of the area. The site has good access to existing roads and public transport, including bus services along Bogong Avenue, Wicklow Drive, Slatey Creek Road and Creswick Road. These connections ensure the Site and Proposed Development will have good access to existing services in Invermay Park, Ballarat North and more broadly, the Ballarat CBD.

20. The proposal would be consistent with the purpose of the GRZ1.

Overlays

21. No overlays apply to the site.

Particular Provisions

22. The following particular provisions are relevant to the proposal:

Clause	Content	Response
52.17	**Native Vegetation** *A permit is required to remove, destroy or lop native vegetation, including dead native vegetation. This does not apply:* • *If the table to Clause 52.17-7 specifically states that a permit is not required.* • *If a native vegetation precinct plan corresponding to the land is incorporated into this scheme and listed in the schedule to Clause 52.16* • *To the removal, destruction or lopping of native vegetation specified in the schedule to this clause.*	The removal of vegetation on Site is exempt in accordance with the table to Clause 52.17-7. Specifically, the only native vegetation proposed to be removed is located in the central western part of the site is less than 10 years old and has naturally established.
52.29	**Land adjacent to a Road Zone, Category 1, or a public acquisition overlay for a Category 1 Road** *A permit is required to:* *Create or alter access to:* • *A road in a Road Zone, Category 1.* • *Land in a Public Acquisition Overlay if the purpose of acquisition is for a Category 1 road.* *Subdivide land adjacent to:* • *A road in a Road Zone, Category 1.* • *Land in a Public Acquisition Overlay if the purpose of acquisition is for a Category 1 road.*	The site is located adjacent to a Road Zone, and subdivision of land is proposed. As such, a permit is triggered under Clause 52.29. VicRoads (as the relevant road authority) have confirmed they have no objection to the proposal.

<table>
<tr>
<td>53.01</td>
<td>Public open space contribution and subdivision
A person who proposes to subdivide land must make a contribution to the council for public open space in an amount specified in the schedule to this clause (being a percentage of the land intended to be used for residential, industrial or commercial purposes, or a percentage of the site value of such land, or a combination of both).
Schedule to clause 52.01
<table>
<tr><th>Type or location of subdivision</th><th>Amount of contribution for public open space</th></tr>
<tr><td>Land covered by the Ballarat West Precinct Structure Plan</td><td>5.31% of Gross Developable Area</td></tr>
<tr><td>The subdivision of all other land defined in the Urban Growth Zone including residential, commercial and industrial</td><td>10%</td></tr>
<tr><td>Land within the Special Use Zone Schedule 16 “Ballarat Station Precinct Redevelopment – Stage One”</td><td>0%</td></tr>
<tr><td>All other land</td><td>5%</td></tr>
</table>
</td>
<td>The relevant provision for this Site is 5%. More than 7% of the Site has been set aside as public open space. Two public open space reserves are proposed, with a total of 5,223sqm of land. The total Site area is approx. 74,000sqm. As such, the amount of open space provided is circa 7% of the site area. Therefore, a monetary contribution will not be required to satisfy the requirements of this clause.</td>
</tr>
<tr>
<td>53.10</td>
<td>Uses And Activities with Potential Adverse Impacts
Clause 53.10 identifies uses and activities, which if not appropriately designed and located, may cause offence or unacceptable risk to the neighbourhood. The table to Clause 53.10-1 sets out the threshold distance required between sensitive uses / zones and new uses with potential adverse impacts.</td>
<td>Whilst the Site and proposal would be located within the threshold distance of the nearby Boral Asphalt Facility (bitumen batching) which is identified in the Table to Clause 53.10-1, the site is already zoned for residential purposes. The purpose of clause 53.10 is not to prevent new residential amenity but to ensure new uses with adverse amenity potential are appropriately located.
The relationship between the development and the existing Boral Asphalt Facility is discussed further under “Key Issues” below.</td>
</tr>
<tr>
<td>56</td>
<td>Residential subdivision
These provisions apply to an application to subdivide land in the Neighbourhood Residential Zone, General Residential Zone, Residential Growth Zone, Mixed Use Zone or Township Zone and any Comprehensive Development Zone or Priority Development Zone that provides for residential development.
These provisions do not apply to an application to subdivide land into lots each containing an existing dwelling or car parking space.</td>
<td>Yes, Clause 56 assessment is attached</td>
</tr>
</table>

KEY MATTERS

Policy support

23. The proposed subdivision is consistent with Clauses 11.01-1S, 11.01-1R (Settlement) and 11.02-1S, as it contributes to urban consolidation objectives by increasing housing choice within an established residential area, with goods access to existing services.

24. Ballarat is forecast to grow significantly towards 160,000 people by 2040. Clause 21.02-1 (Urban Growth) recognises that most of this increased population is planned to be accommodated through infill in established areas and the application assists in achieving this objective.

25. The Ballarat Strategy (2015) outlines a shared community vision for a greener, more vibrant and connected Ballarat, embracing the concept of a 10 Minute City. The '10 Minute City' concept contained in Clause 21.01-3 reflects community aspirations to maintain existing levels of access to destinations and services even when the city grows over time. Maintaining a compact, efficient and productive settlement form is noted in local policy as being critical to Ballarat's long-term future as a 10 Minute City. Specific guidance is provided on change in the following areas (as identified under Clause 21.02-1 and in Figure 2 -Housing Framework Plan):
    - Areas of convenience living.
    - Urban renewal precincts.
    - Strategic investigation areas.
    - Prioritised completion of the Ballarat West Growth Area.
    - Longer-term greenfield investigation areas.
    - Townships.
    - Ongoing change areas.

26. The subject site is located in an ongoing change area. Clause 21.02-2 states ongoing change areas are residential areas that are valued for their existing suburban character and housing supply. Infill development is encouraged at a scale appropriate to their relative distance to high frequency public transport corridors, activity centres, employment and taking into account the neighbourhood character.

27. Objective 5 of the clause seeks to facilitate limited incremental growth in ongoing change areas at a scale and density appropriate to the area. This includes encouraging development that is in keeping with local scale and development intensity, and considers the interface of areas abutting the urban fringe with adjoining land.

28. The creation of 80 additional lots is considered an appropriate outcome for the site, and will allow for new residential development to be undertaken in a way that is responsive to the character of the area. The site is located on the edge of an established residential area, and the proposed subdivision will represent a logical extension of the existing neighbourhood.

29. Proposed property sizes and dimensions are designed to allow for development to be undertaken on each proposed lot in a way which is responsive to the lower density character of the neighbourhood.

Subdivision Design

30. Clause 15.01-3S seeks to ensure subdivisions are designed to achieve attractive, safe, diverse and sustainable neighbourhoods. The proposal has been designed to deliver a range of lot sizes. The layout has been designed to facilitate casual surveillance of all internal streets to improve safety. The proposal provides three open space reserves for recreation, as well as pedestrian and cycle connections. For these reasons, the design of the proposed subdivision is consistent with Clause 15.01-3S.

31. With respect to Clause 56, and specifically, Clause 56.01-1 and 56.01-2, it is noted that the applicant provided sufficient site and context detail, and proposed an appropriate subdivision design response. Furthermore, the application is consistent with the all relevant provisions of Clauses 56-02 to 56-09 as can be seen in the attachment.

Land Use Compatibility (Noise and Air quality)

32. It is noted that the proposed subdivision is located in proximity to uses (namely the Boral Asphalt Facility) with potential adverse impacts, and specifically, within the threshold distance identified under Clause 53.10. However, the bitumen batching use is existing, and the Site is currently zoned for residential uses. As such, there is no technical land use conflict under Clause 53.10.

33. Clause 13.07-1S of the Planning Scheme seeks to ensure the development of land is compatible with nearby land uses, and seeks to protect existing commercial, industrial and other uses from encroachment by use or development that would compromise the ability of those uses to function safely and effectively.

34. It is acknowledged that some land to the west and north of the Site contains industrial uses. However, given the zoning of the adjoining land as IN1Z and the Site as GRZ1, it is unavoidable that residential and industrial development would occur side-by-side in this location.

35. As such, in this instance, it is essential to consider and mitigate any potential adverse impacts between these uses, including noise, odour and air quality.

36. Clause 13.05-1S seeks to assist with the control of noise effects on sensitive land uses, and ensure that development is not prejudiced and community amenity and human health is not adversely impacted by noise emissions. Clause 13-05-1S encourages the use a range of building design, urban design and land use separation techniques as appropriate to the land use functions and character of the area.

37. The Council has undertaken a detailed review of the acoustic assessment submitted by the applicant, and is satisfied that on balance, the impact of noise from adjoining land uses on the proposed subdivision, and vice versa, would be acceptable.

38. Clause 13.06-1S seeks to assist with the protection and improvement of air quality, and ensure, wherever possible, that there is suitable separation between land uses that reduce air amenity and sensitive land uses.

39. Through detailed negotiation with the EPA, the applicant has produced additional air quality and odour assessments. These have been reviewed, in their latest response, the EPA confirmed that the updated air quality response and assessment provided largely addresses the issues previously raised. Council is comfortable that on balance, there would be no cause for concern with respect to air quality.

Vegetation

40. The removal of vegetation on Site is exempt in accordance with the table to Clause 52.17-7. Specifically, the only native vegetation proposed to be removed is located in the central western part of the site is less than 10 years old and has naturally established.

Bushfire

41. Whilst the site is not covered by the Bushfire Management Overlay, it is located within a Bushfire Prone Area. As such, Clause 13.02-1S is a relevant consideration.

42. The majority of lots (Lots 40 – 101) achieve a Bushfire Attack Level (BAL) rating of 12.5 which is acceptable under Clause 13.02-1S.

43. Lots 102 – 111, which are located on the Site's northern boundary receive a BAL rating of 19 which is not acceptable under Clause 13.02-1S. As such, setbacks and shielding are required for these lots.

Drainage

44. Clause 19.03-3S requires that the development has sustainable management of water supply, water resources, wastewater, drainage and stormwater.

45. The applicant originally advised that the development would rely on the drainage solution approved through PLP/2018/251. Officers were concerned about the applicant's approach to drainage, and as such, a mediation meeting was held between the Council and the applicant on 02 December 2019. Subsequently, the applicant proposed a revised solution.

46. The revised drainage proposals include:
    - Minimising drainage discharges to the brick culvert.
    - Keeping all major works outside of the VicTrack reserve.
    - Maintaining or reducing pre-development peak discharges to the railway reserve.
    - Using the existing 900mm culvert under the railway line to its maximum feasible capacity for drainage from the subject developments (Stage A (completed), and Stage B1 and B2 (proposed))
    - The removal of the existing Stage 1 750mm pipe outfall to the brick culvert, with this pipe being re-directed north into the Stage 2 Drainage System, and the sediment basin / retarding basin (SBRB)
    - Provision of a 300mm diameter low flow outlet from the SBRB back to the brick culvert (water quality treatment flows only).
    - Connection of the SBRB to the retarding basin on the north side of Bogong Ave via a large box culvert under the road, so that the two storages will function as one in times of flood.
    - Capture of all drainage outflows from the gold course storage system (North of Heinz Lane) and existing Bogong Ave development into the Stage 2 drainage system, and the twin retarding storages.

47. Council is satisfied that the revised drainage proposals are consistent with Clause 19.03-3S, and will ensure no detrimental impact of the proposed development accrues, whilst reasonably and effectively mitigating existing flooding issues downstream of the railway reserve.

48. It is accepted that it is not the role of this development to fully resolve existing downstream flooding issues.

Traffic, Access, Movement

49. Clause 65.02 of the Planning Scheme requires that road layouts be considered as part of the assessment of a subdivision. Specifically, the layout of roads having regard to their function and relationship to existing roads must be considered.
    - That the proposed staged multi-lot plan of subdivision of Lot 1 Heinz Lane, Invermay Park (Stages B1 & B2) is not supported in its present form.
    - That the internal roadways are designed and constructed to the approval of Council's Infrastructure Development Department generally in conformance with Council's IDM requirements including minimum road reserve widths of 18m and minimum 7.9m roadway between kerbs for access roads and 20m and 14.5m respectively for collector roads.

- That intersections along the route connecting Heinz Lane to Bogong Avenue be designed to accommodate bus turning movements and that the pavement width of this connecting road is commensurate with Council's Collector Standard.

50. A 16m wide reserve adjacent to a reserve is considered appropriate for an access road however a minimum of 18m width, in line with council IDM published policy, is considered appropriate where lots front both sides of the road. Officers did not support narrower road reserves in Stage A and continue to hold that view. One such 16m reserve is proposed running east/west in the continuation of Wedge Circuit immediately north of Stage A. All other reserve widths in Stage B comply with the policy. It is noted that some 16m road reserve widths received approval in Stage A.

51. To cater for future public bus routes, it was recommended that intersections along the route connecting Heinz Lane to Bogong Avenue be designed to accommodate bus turning movements. Such a bus route supports the need for a collector road pavement profile. All road design profiles should be to the approval of Council's Engineering Development Department.

52. Conditions have been included on the permit to ensure the road layouts (including provision of appropriate footpaths and public lighting) are functional.

Cultural Heritage

53. The northern part of the Site is located within an Area of Cultural Heritage Sensitivity. Clause 15.03-2S seeks to ensure that places of Aboriginal cultural heritage significance are protected and conserved, and sets the following strategies:
    - Identify, assess and document places of Aboriginal cultural heritage significance, in consultation with relevant Registered Aboriginal Parties, as a basis for their inclusion in the planning scheme.
    - Provide for the protection and conservation of pre-contact and post-contact Aboriginal cultural heritage places.

54. Ensure that permit approvals align with the recommendations of any relevant Cultural Heritage Management Plan approved under the *Aboriginal Heritage Act 2006*.

55. The application is supported by a Cultural Heritage Management Plan (CHMP) No. 15765.

Conclusion

56. In determining if the planning application demonstrates net community benefit in accordance with Clause 71.02-3, the following matters have been considered:
    - The application is consistent with relevant state and local planning policy.
    - The subdivision will provide appropriately sized and designed lots, enabling the delivery of housing in a suitable location, with good access to existing transport, services and facilities.

OFFICER RECOMMENDATION

57. That the Planning Delegated Committee:

57. **Having considered all the matters required under Section 60 of the *Planning and Environment Act 1987*, it is recommended that the Responsible Authority grant a Notice of Decision to Grant a Planning Permit in accordance with the Ballarat Planning Scheme in respect of the land known and described as Lot A Heinz Lane, INVERMAY PARK VIC 3350, for a Staged multi lot subdivision.**

58. **Having caused notice of the application to be given under Section 52 of the *Planning and Environment Act 1987* and having considered all the matters required under Section 60 of the *Planning and Environment Act 1987* decides to Grant a Notice of Decision to Grant a Permit under the provisions of the Ballarat Planning Scheme, subject to the following conditions:**

Amended Plans Required

1. **Prior to certification of the plan of subdivision, for each stage, amended plans to the satisfaction of the Responsible Authority must be submitted to and approved by the Responsible Authority. When approved, the plans will be endorsed and will form part of the permit. The plans must be drawn to scale with dimensions and three copies must be provided. The plans must be generally in accordance with advertised plans but modified to show:**
    a. **Increase of all road widths to 18m minimum, to the satisfaction of the Responsible Authority.**
    b. **Completion of a functional layout plan, in accordance with condition 3 of this planning permit.**
    c. **Completion of engineering and specification plans, in accordance with condition 4 of this planning permit.**
    d. **Completion of drainage, stormwater detention and stormwater treatment plans and computations, in accordance with condition 12 of this planning permit.**
    e. **Completion of a Construction Management Plan, in accordance with condition 55 of this permit.**

All to the satisfaction of the Responsible Authority.

No further changes

2. **The formal plan of subdivision lodged for certification must be generally in accordance with the approved plan and must not be modified except to comply with statutory requirements or with the further written consent of the Responsible Authority.**

Functional layout plan

3. **Prior to certification of the plan of subdivision, a Functional Layout Plan for the subdivision must be submitted to and approved by the Responsible Authority. Once approved, the Functional Layout Plan will be endorsed and will then form part of the permit. The Functional Layout Plan must be in accordance with the Infrastructure Design Manual (IDM) and Council's Standard Cross-sections.**

Engineering Plans and Construction

4. **Prior to certification of the plan of subdivision, engineering plans and specifications of the subdivision to the satisfaction of the Responsible Authority must be submitted to and approved by the Responsible Authority. Once approved, the engineering plans and specifications will be endorsed and will then form part of the permit. The engineering plans and specifications must accord with the Infrastructure Design Manual and Council's Standard Cross-sections and any further requirements specified by the Responsible Authority.**

5. **All engineering works must be constructed in accordance with the approved plans and specifications and shall be completed to a standard satisfactory to the Responsible Authority prior to the issue of Statement of Compliance for each stage.**
   The engineering plans must detail:

   a. **Construction of all roads internal to the subject site with the main north-south connection road specified as an 18-metre-wide road reserve inclusive of thru carriageways and a parking lane to be located on the western side of the road.**
   b. **Intersections with surrounding roads/streets.**
   c. **Extension of Bogong Avenue.**
   d. **Construction of kerb and channels**
   e. **Construction of all footpaths and shared paths**
   f. **Construction of drainage, nature strips and all other ancillary works as specified by the Responsible Authority.**

6. **At the completion of the works, one set of 'as constructed' civil plans shall be submitted to the Responsible Authority.**

Footpath Construction

7. **Prior to any works commencing, footpath plans to the satisfaction of the Responsible Authority must be submitted to and approved by the Responsible Authority. When approved, the footpath plans will be endorsed and will then form part of the permit. The footpath plans must accord with the Infrastructure Design Manual and Council's Standard Drawings.**

8. **Prior to the issue of a Statement of Compliance for each stage, all footpath works must be constructed in accordance with the approved footpath plans and must be completed to the satisfaction of the Responsible Authority.**

Nature strips

9. **Prior to the issue of a Statement of Compliance for each stage, the naturestrip fronting all lots and reserves in the development must be constructed in accordance with levels and specifications submitted to and approved by the Responsible Authority.**
   The nature strip works must include:

   a. **The reshaping of the nature strip;**
   b. **Topdressing the area with a 75 millimetre rolled depth of good quality loamy topsoil free of any weed or seed; and**
   c. **Seeding the area with an appropriate seed mix.**

10. **Prior to the issue of a Statement of Compliance for each stage, all naturestrip works approved by the Responsible Authority must be completed in accordance with Council's Landscape Design Manual and to the satisfaction of the Responsible Authority.**

11. **Within six months following the completion of Statement of Compliance of the final stage, all dead plants and grasses must be replaced in accordance with the endorsed plans.**

Drainage Plans and Construction

12. **Prior to certification of the plan of subdivision, drainage, stormwater detention and stormwater treatment plans and computations for the subdivision must be submitted to and approved by the Responsible Authority. Once approved, the drainage, stormwater detention and stormwater treatment plans and computations will be endorsed and will then form part of the permit. The drainage, stormwater detention and stormwater treatment plans must accord with the Infrastructure Design Manual and Water Sensitive Urban Design Guidelines.**

13. **Prior to the issue of a Statement of Compliance for each stage, all drainage works must be constructed in accordance with the approved drainage, stormwater detention and stormwater treatment plans and computations and must be completed to the satisfaction of the Responsible Authority.**

14. **At the completion of the works one set of 'as constructed' civil plans shall be submitted to the Responsible Authority.**

15. **Any proposed discharge of stormwater requiring a direct and/or modifying and existing connection to a designated waterway (as defined by the *Water Act 1989*) will require approval by the relevant Catchment Management Authority.**

Drainage Easements

16. **All easements deemed necessary to protect existing or future drainage lines within the proposed development site and properties between the development site and the nominated point of discharge shall be created to the satisfaction of the Responsible Authority.**

Street Lighting

17. **Prior to the issue of a Statement of Compliance for each stage, a Street Lighting Plan prepared to the satisfaction of the Responsible Authority and by a suitably qualified professional must be submitted to and approved by the Responsible Authority. Once approved, the Street Lighting Plan will be endorsed and will then form part of the permit. The design of street lights must accord with the Infrastructure Design Manual, using energy efficient 18w LED globes in local streets, T5 fluorescent globes in street lighting managed by VicRoads and ensure compliance with AS1158 (or the AS at the time of installation). Fittings must comply with Council's street light service provider's standard fittings. Street lighting must be designed to be directed away from the Rail Reserve. Non-standard fittings will not be permitted.**

18. **Prior to the issue of a Statement of Compliance for each stage, all works detailed on the approved Street Lighting Plan must be installed to the satisfaction of the Responsible Authority.**

Street Naming and Numbering

19. **Prior to the issue of a Statement of Compliance for each stage, the permit holder must contact Council's Revenue Officer/Rates Office to arrange street numbering and naming requirements. All costs associated with the numbering of properties and naming of streets (including but not limited to supply and installation of street signs) must be borne by the permit holder.**

20. **Prior to the issue of a Statement of Compliance for each stage, all street number and naming requirements must be completed to the satisfaction of the Responsible Authority.**

Registration of Section 173 agreement

21. **Prior to the issue of a Statement of Compliance for any stage of the subdivision authorised by this permit, the permit holder must enter into an Agreement with the Responsible Authority and Boral Asphalt, pursuant to Section 173 of the *Planning and Environment Act 1987*. All costs associated with setting up the Agreement must be borne by the owner. The Agreement must be registered on Title and run with the land, and must provide to the satisfaction of the Responsible Authority:**

    a. **That owner acknowledges and agrees:**
        i. **The use and development of Asphalt Land has the potential to:**
            A. **Emit and/or generate noise, dust, fumes, impacts on views and amenity, and all of the other effects associated with the conduct of asphalt batching plant; and**
            B. **Increase traffic (including heavy vehicle movements) in and about the Asphalt Land; and**
        ii. **The Asphalt Land may impact the local amenity and aesthetic enjoyment of properties in the vicinity of the Asphalt Land, including the Owner's land.**

    b. **The Owner covenants and agrees with the Beneficial Owner and the Responsible Authority that the Owner:**
        i. **Will do things necessary to register a memorandum of this Agreement on the Certificate of Title of the Land pursuant to Section 181 of the Act;**
        ii. **Must not sell or enter into any contract to sell the Land until this Agreement has been registered on the titles of the Land.**
        iii. **Must meet all costs of preparing and recording this agreement.**

Contamination Assessment

22. **Prior to certification of the Plan of Subdivision, a Preliminary Site Investigation Report prepared in accordance with AS4482.1-2005 must be submitted to the Responsible Authority for the whole site.**

23. **Should the Preliminary Site Investigation report indicate contaminating activities took place on the site or that contaminants are present, a Detailed Site Investigation in accordance with AS4482.1–2005 shall be undertaken. The Detailed Site Investigation Report must include any recommended remediation works.**

24. **If the report is accepted by the Responsible Authority, the remediation works must be completed to the satisfaction of the Responsible Authority prior to the issue of a Statement of Compliance for each stage.**

25. If there are concerns about the nature and extent of the contamination found in the Preliminary and Detailed Site Investigation reports, the Responsible Authority reserves the right to require a statutory environmental audit to be undertaken. In this case either:

a. A certificate of environmental audit shall be issued for the land in accordance with Part IXD of the *Environment Protection Act 1970* prior to the issue of a Statement of Compliance for each stage; OR

b. An environmental auditor appointed under the *Environmental Protection Act 1970* must make a statement in accordance with Part IXD of that Act that the environmental conditions of the land are suitable for the intended use prior to the issue of a Statement of Compliance for each stage; to the satisfaction of the Responsible Authority.

c. Where a Statement of Environmental Audit is issued for the land, the development including subdivision hereby approved must comply with all the directions and conditions contained within the Statement.

d. Where a Statement of Environmental Audit is issued for the land, before the issue of a Statement of Compliance for each stage, a letter prepared by an Environmental Auditor appointed under Section 53S of the *Environment Protection Act 1970* or such other qualified person to the satisfaction of the Responsible Authority must be submitted to the Responsible Authority to verify that the directions and conditions contained within the statement have been satisfied.

e. Unless otherwise approved in writing by the Responsible Authority, where a Statement of Environmental Audit is issued for the land, and any condition of that Statement requires any maintenance or monitoring of an ongoing nature, before the issue of a Statement of Compliance for any stage of the subdivision authorised by this permit, the permit holder must enter into an Agreement with the Responsible Authority pursuant to Section 173 of the *Planning and Environment Act 1987*. All costs associated with setting up the Agreement must be borne by the owner. The Agreement must be registered on Title and run with the land, and must provide to the satisfaction of the Responsible Authority:

i. That the registered proprietor will undertake all required maintenance and/or monitoring in accordance with the statement.

ii. Before development commences, application must be made to the Registrar of Titles to Register the Section 173 Agreement on the title to the land under Section 181 of the *Planning and Environment Act 1987*.

<u>Sediment on Roadways</u>

26. No material shall be deposited on any road external to the site by any means including construction vehicles or associated plant entering or leaving the land subject to this permit. Any material deposited on the road shall be removed by mechanical or manual means to the satisfaction of the Responsible Authority.

Note 1: Depositing such material on Responsible Authority's Roads is an offence under the *Environment Protection (Resource Efficiency) Act 1970* and penalties may apply.

Note 2: Any costs associated with a clean up of road surfaces borne by the Responsible Authority must be met by the permit holder.

Sediment Control Measures

27. **Prior to the commencement of any works on site, a Sediment Control Plan detailing sediment control measures during construction must be submitted to the Responsible Authority for approval. Control measures should be consistent with the EPA publication 480 'Environment Guidelines for Major Construction Sites'. When approved, the Sediment Control Plan shall form part of this permit. All sediment control measures shall be undertaken and remain in place until the completion of site works to the satisfaction of the Responsible Authority.**

Filling of Lots

28. **If lots are to be filled, details of the filling must be shown on the road and drainage construction plans before approval by the Responsible Authority.**
    a. **Details to be shown include:**
        i. **Existing natural features**
        ii. **Existing improvements**
        iii. **Natural and finished surface levels**

29. **Once approved, the filling operation must be undertaken in accordance with the plan in the following way:**
    a. **Prior to the commencement of filling commencing on any particular area of the site, topsoil must be stripped and stockpiled on the site. Topsoil is not to be removed from the site but stored to be used and spread over the site on the completion of the filling operation, with additional soil if needed, to a depth of 100 millimetres.**
    b. **The land shall be shaped so as not to concentrate water onto adjoining land.**
    c. **Only clean inert filling must be deposited on the site.**
    d. **No material must be stored or dumped on any area not approved for filling or stockpiling.**
    e. **No damage must be caused to kerb and channel, road pavement, strip-strips, drainage infrastructure or any other Responsible Authority asset due to the filling operation. If any damage is caused, the damage must be repaired immediately to the satisfaction of the Responsible Authority.**
    f. **Deposited material must be shaped in accordance with the approved detailed plan or as directed by the Responsible Authority.**
    g. **Any land proposed to be further developed by the construction of buildings, roadways or drainage lines shall be compacted to 95% Modified (In accordance with Australian Standard 1289.5-2.1). Test results must be submitted to the Responsible Authority.**
    h. **Appropriate dust suppression measures must be implemented to ensure that a nuisance is not caused to adjoining landowners or the general public to the satisfaction of the Responsible Authority.**
    i. **If the filling is not completed in accordance with the approved plan, an as constructed plan, showing natural and finished surface levels, must be submitted to the Responsible Authority.**

30. **Prior to the issue of a Statement of Compliance for each stage, all works required to comply with this condition must be carried out and completed to the satisfaction of the Responsible Authority.**

Fees for Checking Engineering Plans

31. **Prior to the issue of Statement of Compliance for each stage, a fee for checking engineering plans shall be paid to the Responsible Authority, pursuant to Section 43(2)(a)(iv) of the *Subdivision Act 1988* and Clause 9 of the Subdivision (Fees)**

Interim Regulations 2012. The fee shall be in accordance with the Infrastructure Design Manual and must be approved in writing by the Responsible Authority prior to payment.

Supervision Fee

32. Prior to the issue of Statement of Compliance for each stage, a supervision fee shall be paid to the Responsible Authority pursuant to Section 17(2)(b) of the *Subdivision Act 1988* and Clause 8 of the Subdivision (Fees) Interim Regulations 2012. The fee shall be in accordance with the Infrastructure Design Manual and must be approved in writing by the Responsible Authority prior to payment.

Guarantee of Works

33. Prior to the issue of Statement of Compliance for each stage, or unless otherwise agreed in writing by the Responsible Authority, the permit holder must provide a Guarantee of Work (bond) with the Responsible Authority in accordance with the Infrastructure Design Manual. The guarantee must be based on the same priced Bill of Quantities used to calculate the plan checking and supervision fees and must be approved in writing by the Responsible Authority prior to lodgement.

34. The guarantee shall be released at the termination of the Defects Liability Period, subject to the completion of all defect rectification works to the satisfaction of the Responsible Authority.

Telecommunications

35. The owner of the land must enter into an agreement with:

- **a telecommunications network or service provider for the provision of telecommunication services to each lot shown on the endorsed plan in accordance with the provider's requirements and relevant legislation at the time; and**
- **a suitably qualified person for the provision of fibre ready telecommunication facilities to each lot shown on the endorsed plan in accordance with any industry specifications or any standards set by the Australian Communications and Media Authority, unless the applicant can demonstrate that the land is in an area where the National Broadband Network will not be provided by optical fibre.**

36. Before the issue of a Statement of Compliance for any stage of the subdivision under the Subdivision Act 1988, the owner of the land must provide written confirmation from:

- **a telecommunications network or service provider that all lots are connected to or are ready for connection to telecommunications services in accordance with the provider's requirements and relevant legislation at the time; and**
- **a suitably qualified person that fibre ready telecommunication facilities have been provided in accordance with any industry specifications or any standards set by the Australian Communications and Media Authority, unless the applicant can demonstrate that the land is in an area where the National Broadband Network will not be provided by optical fibre.**

VicRoads REF: PPR 31028/19

37. **Prior to Statement of Compliance of the subdivision the following works on Western Freeway road reserve must be completed at no cost to and to the satisfaction of the Head, Transport for Victoria:**
    a. **An acoustic earth mounding. Design details must be provided to the Head, Transport for Victoria for approval prior to the commencement of these works.**

       Note: Separate consent for works within the road reserve and the specifications of these works is required under the *Road Management Act 2004*. For the purposes of this application the works will include provision of:
    b. **An acoustic earth mounding**

Central Highlands Water Authority REF:9/8258

38. **Any plan lodged for certification will be referred to the Central Highlands Region Water Corporation pursuant to Section 8(1)(a) of the *Subdivision Act 1988*.**

39. **Reticulated sewerage facilities must be provided to each lot by the owner of the land (or applicant, in anticipation of becoming the owner) to the satisfaction of the Central Highlands Region Water Corporation. This will include the construction of works and the payment of major works contributions by the applicant.**

40. **A reticulated water supply must be provided to each lot by the owner of the land (or applicant, in anticipation of becoming the owner) to the satisfaction of the Central Highlands Region Water Corporation. This will include the construction of works and the payment of major works contributions by the applicant.**

41. **The owner will provide easements to the satisfaction of the Central Highlands Region Water Corporation, which will include easements for pipelines or ancillary purposes in favour of the Central Highlands Region Water Corporation, over all existing and proposed sewerage facilities within the proposal.**

42. **If required the owner will provide easements to the satisfaction of Central Highlands Region Water Corporation for pipeline or ancillary purposes through other land in the vicinity, as it is considered by the Authority that such easements may be required for the economical and efficient subdivision or servicing of or access to land covered by the subdivision.**

43. **The owner must demonstrate to the satisfaction of Central Highlands Region Water Corporation how the subdivision design incorporates the principles of water sensitive urban design (WSUD) and the integrated water management (IWM) requirements of the Ballarat City Integrated Water Management Plan to achieve the associated potable water reduction targets. Where this involves a requirement for future owners of the lots to install and maintain rainwater tanks the owner must enter into an agreement with Central Highlands Region Water Corporation (CHW) and City of Ballarat under Sections 173 and 174 of the *Planning and Environment Act 1987* to record this requirement, unless an alternative means of recording the requirement is agreed to Central Highlands Water's satisfaction. If the land is developed in stages, the above conditions will apply to any subsequent stage of the subdivision.**

Department of Transport

44. **Prior to the issue of a Statement of Compliance for any stage abutting the railway land (Vic Track land) a 1.8 metre timber fence (in accordance with SAST-1 V/Line fencing Right of Way) must be installed along the boundary of the land and at no cost to and to the satisfaction of the Head, Transport for Victoria and Vic Track.**

45. **The boundary of the land with railway land must be fenced at all times during the construction of the development to the satisfaction of the Head, Transport for Victoria and Vic Track.**

46. **No drainage or effluent must enter railway land and must be connected to a legal point of discharge**

47. **The permit holder must ensure that the operating of lights is directed away from the rail corridor to ensure no disruption to the operation of trains and visibility of train drivers to the satisfaction of the Head, Transport for Victoria.**

Country Fire Authority REF:15000-63165-93885

Subdivision plan not to be altered

48. **The subdivision as shown on the endorsed plans must not be altered without the consent of CFA.**

Hydrants

49. **Prior to the issue of a Statement of Compliance under the *Subdivision Act 1998* the following requirements must be met to the satisfaction of the CFA:**
    a. **Above or below ground operable hydrants must be provided. The maximum distance between these hydrants and the rear of all building envelopes (or in the absence of the building envelope, the rear of all lots) must be 120 metres and hydrants must be no more than 200m apart. These distances must be measured around lot boundaries.**
    b. **The hydrants must be identified with marker posts and road reflectors as applicable to the satisfaction of the Country Fire Authority.**

    Note: CFA's requirements for identification of hydrants are specified in 'Identification of Street Hydrants for Firefighting Purposes' available under publications on the CFA web site (www.cfa.vic.gov.au).

Roads

50. **Roads must be constructed to a standard so that they are accessible in all weather conditions and capable of accommodating a vehicle of 15 tonnes for the trafficable road width.**
    a. **The average grade must be no more than 1 in 7 (14.4%) (8.1 degrees) with a maximum of no more than 1 in 5 (20%) (11.3 degrees) for no more than 50 meters. Dips must have no more than a 1 in 8 (12%) (7.1 degree) entry and exit angle.**
    b. **Curves must have a minimum inner radius of 10 metres.**
    c. **Have a minimum trafficable width of 3.5 metres and be clear of encroachments for at least 0.5 metres on each side and 4 metres above the access way.**
    d. **Roads more than 60m in length from the nearest intersection must have a turning circle with a minimum radius of 8m (including roll-over kerbs if they are provided) T or Y heads of dimensions specified by the CFA may be used alternatives.**

Powercor Australia Ltd REF:307290595

51. **This letter shall be supplied to the applicant in its entirety.**

52. **The plan of subdivision submitted for certification under the *Subdivision Act 1988* shall be referred to the Distributor in accordance with Section 8 of that Act.**

53. **The applicant shall provide an electricity supply to all lots in the subdivision in accordance with the Distributor's requirements and standards. Notes: Extension, augmentation or rearrangement of the Distributor's electrical assets may be required to make such supplies available, with the cost of such works generally borne by the applicant.**

54. **The applicant shall ensure that existing and proposed buildings and electrical installations on the subject land are compliant with the Victorian Service and Installation Rules (VSIR).**
    Notes: Where electrical works are required to achieve VSIR compliance, a registered electrical contractor must be engaged to undertake such works.

55. **The applicant shall, when required by the Distributor, set aside areas with the subdivision for the purposes of establishing a substation or substations. Notes: Areas set aside for substations will be formalised to the Distributor's requirements under one of the following arrangements:**
    a. **RESERVES established by the applicant in favour of the Distributor.**
    b. **SUBSTATION LEASE at nominal rental for a period of 30 years with rights to extend the lease for a further 30 years.**
       The Distributor will register such leases on title by way of a caveat prior to the registration of the plan of subdivision.

56. **The applicant shall establish easements on the subdivision, for all existing Distributor electric lines where easements have not been otherwise provided on the land and for any new powerlines to service the lots or adjust the positioning existing easements.**
    Notes:
    a. **Existing easements may need to be amended to meet the Distributor's requirements**
    b. **Easements required by the Distributor shall be specified on the subdivision and show the Purpose, Origin and the In Favour of party as follows:**

Easement Ref	Purpose	Width (Metres)	Origin	Land Benefited / In Favour Of
	Power Line		Section 88 - Electricity Industry Act 2000	Powercor Australia Ltd

Construction Management Plan

57. **Prior to the Statement of Compliance issued for Stage 2, a Construction Management Plan must be prepared to the satisfaction of the Responsible Authority and endorsed as part of this permit. The Plan must detail:**

    a. **Hours of demolition and construction to accord with Local Laws**
    b. **Management of adjoining roads, and roads within Stage 1, to ensure that they are kept free of parked or standing vehicles or any other obstruction, including building materials, equipment, etc. to maintain free vehicle**

passage to abutting benefitting properties at all times, unless with the written consent of the Responsible Authority

c. Methods to contain dust, dirt and mud within the site and the method and frequency of clean up procedures, including the management of on-site storage waste construction bins and vehicle washing

d. Management of parking of construction machinery and workers vehicles to prevent adverse impact on nearby properties

e. Management of staging of heavy vehicles, site deliveries and unloading and lifting points with expected frequency, and traffic management in the vicinity, ensure routes to and from the site minimise disruption to residential properties

f. Minimising disruption to pedestrian access along footpaths

g. Measures to minimise noise and other amenity impacts from mechanical equipment, including idling trucks, and demolition/construction activities, especially outside of daytime hours

h. The provision of adequate environmental awareness training for all on-site contractors and sub-contractors

i. A liaison officer for contact by the public and the Responsible Authority in the event of relevant queries or problems experienced.

58. All works on the land must be undertaken in accordance with the endorsed Construction Management Plan to the satisfaction of the Responsible Authority.

Expiry of Permit Staged Subdivision

59. Where the subdivision is to be developed in stages, the time specified for the commencement of the first stage is two years from the date of this permit. The time specified for the commencement of any subsequent stage is five (5) years from the date of this permit and the time specified for the completion of each stage is five years from the date of its commencement.

60. The Responsible Authority may extend the periods referred to if a request is made in writing before the permit expires or within three months afterwards.

Note: The starting of a subdivision is regarded by *Section 68(3A)* of the *Planning and Environment Act 1987* as the certification of a plan under Section 6 of the *Subdivision Act 1988*. Completion is regarded as registration of the subdivision.

ATTACHMENTS

1. Governance Review [**6.2.1** - 1 page]
2. Asessment Clause [**6.2.2** - 15 pages]
3. Plan of Proposed Subdivision Layout [**6.2.3** - 1 page]
4. Acoustic Report Redacted [**6.2.4** - 46 pages]
5. Peer Review Acoustic Report Redacted [**6.2.5** - 47 pages]
6. Referral Responses (1)_ Redacted [**6.2.6** - 12 pages]

ALIGNMENT WITH COUNCIL VISION, COUNCIL PLAN, STRATEGIES AND POLICIES

1. This report aligns with Council's Vision, Council Plan, Strategies and Policies.

COMMUNITY IMPACT

2. There are no community impacts identified for the subject of this report.

CLIMATE EMERGENCY AND ENVIRONMENTAL SUSTAINABILITY IMPLICATIONS

3. There are no climate emergency and environmental sustainability implications identified for the subject of this report.

ECONOMIC SUSTAINABILITY IMPLICATIONS

4. There are no economic sustainability implications identified for the subject of this report.

FINANCIAL IMPLICATIONS

5. If applicable, the cost of running a VCAT hearing is already included within the Statutory Planning Unit's approved budget.

LEGAL AND RISK CONSIDERATIONS

6. There are no legal and risk considerations relevant to the subject of this report.

HUMAN RIGHTS CONSIDERATIONS

7. It is considered that the report does not impact on any human rights identified in the *Charter of Human Rights and Responsibilities Act 2006.*

COMMUNITY CONSULTATION AND ENGAGEMENT

8. This planning permit application was advertised pursuant to Section 52 of the *Planning and Environment Act 1987*. Council received five objections in response to the application.

GENDER EQUALITY ACT 2020

9. There are no gender equality implications identified for the subject of this report.

CONFLICTS OF INTEREST THAT HAVE ARISEN IN PREPARATION OF THE REPORT

10. Council officers affirm that no general or material conflicts need to be declared in relation to the matter of this report.

ASSESSMENT - CLAUSE 56 ASSESSMENT

56.02-1 Strategic Implementation Objective	Standard C1	Met	Comments
To ensure that the layout and design of a subdivision is consistent with and implements any objective, policy, strategy or plan for the area set out in this scheme.	*An application must be accompanied by a written statement that describes how the subdivision is consistent with and implements any relevant growth area, activity centre, housing, access and mobility, community facilities, open space and recreation, landscape (including any native vegetation precinct plan) and urban design objective, policy, strategy or plan for the area set out in this scheme.*	Yes	The applicant has addressed the relevant requirements of C1 within the planning application.

56.03-1 Compact & walkable neighbourhoods objective	Standard C2	Met	Comments
To create compact neighbourhoods that are oriented around easy walking distances to activity centres, schools and community facilities, public open space and public transport. *To allow easy movement through and between neighbourhoods for all people.*	*A subdivision should implement any relevant growth area or any approved land-use and development strategy, plan or policy for the area set out in this scheme.* *An application for subdivision must include a plan of the layout of the subdivision that:* • *Meets the objectives (if relevant to the class of subdivision specified in the zone) of Clause 56.03-2 ; Clause 56.03-3 ; Clause 56.04-1; Clause 56.06-2 ; Clause 56.06-3 ; Clause 56.06-4)* • *Shows the 400 metre street walking distance around each existing or proposed bus stop, 600 metres street walking distance around each existing or proposed tram stop and 800 metres street walking distance around each existing or proposed railway station and shows the estimated number of dwellings within those distances.* • *Shows the layout of the subdivision in relation to the surrounding area.* • *Is designed to be accessible for people with disabilities.*	Yes	The proposed subdivision will provide walking and cycling links to existing infrastructure on Bogong Avenue and Heinz Lane, and will provide 7% of the site area as open space reserves. The site is located within short walking distance of existing bus stops.
56.03-2 Activity Centre Objective	**Standard C3**	**Met**	**Comments**
To provide for mixed-use activity centres, including neighbourhood activity centres, of appropriate area and location.	*A subdivision should implement any relevant activity centre strategy, plan or policy for the area set out in this scheme.* *Subdivision should be supported by activity centres that are:* • *Accessible by neighbourhood and regional walking and cycling networks.* • *Served by public transport that is connected to the regional public transport network.* • *Located at public transport interchange points for the convenience of passengers and easy connections between public transport services.*	N/A	The Ballarat Activity Centre Strategy does not set any outcomes for the Site. The subdivision has good accessibility and will have good access to existing activity centres in Ballarat.

	• *Located on arterial roads or connector streets.* • *Of appropriate size to accommodate a mix of uses that meet local community needs.* • *Oriented to support active street frontages, support street-based community interaction and pedestrian safety*		
56.03-3 Planning for Community Facilities Obj	**Standard C4**	**Met**	**Comments**
To provide appropriately located sites for community facilities including schools, libraries, preschools and childcare, health services, police and fire stations, recreation and sports facilities.	*A subdivision should:* • *Implement any relevant regional and local community facility strategy, plan or policy for the area set out in this scheme.* • *Locate community facilities on sites that are in or near activity centres and public transport.* *School sites should:* • *Be integrated with the neighbourhood and located near activity centres.* • *Be located on walking and cycling networks.* • *Have a bus stop located along the school site boundary.* • *Have student drop-off zones, bus parking and on-street parking in addition to other street functions in abutting streets.* • *Adjoin the public open space network and community sporting and other recreation facilities.* • *Be integrated with community facilities.* • *Be located on land that is not affected by physical, environmental or other constraints.* *Schools should be accessible by the Principal Public Transport Network in Metropolitan Melbourne and on the regional public transport network outside Metropolitan Melbourne.* *Primary schools should be located on connector streets and not on arterial roads.* *New State Government school sites must meet the requirements of the Department of Education and Training and abut at least two streets with sufficient widths to provide student drop-off zones, bus parking and on-street parking in addition to other street functions.*	N/A	No specific community facility requirements have been prescribed for the Site. The subdivision will have good access to existing community facilities within the local area.
56.03-4 Built Environment Objective	**Standard C5**	**Met**	**Comments**
To create urban places with identity and character.	*The built environment should:* • *Implement any relevant urban design strategy, plan or policy for the area set out in this scheme.* • *Provide living and working environments that are functional, safe and attractive.* • *Provide an integrated layout, built form and urban landscape.* • *Contribute to a sense of place and cultural identity.*	Yes	The development has been designed to ensure an appropriate buffer treatment to the railway line to the west whilst integrating with the golf course to the south-east The proposed road reserve treatments are alternative to other areas to provide a sense of place as

	An application should describe the identity and character to be achieved and the elements that contribute to that identity and character.		well as individual character and identity.

56.04-1 Lot diversity and distribution objective	**Standard C7**	**Met**	**Comments**
To achieve housing densities that support compact and walkable neighbourhoods and the efficient provision of public transport services	*A subdivision should implement any relevant housing strategy, plan or policy for the area set out in this scheme.*	Yes	The site is part of the identified "ongoing change area", which seeks to deliver incremental growth at an appropriate scale and density. No average net residential density is specified. Lot sizes vary from 413sqm to 934sqm providing some opportunity for housing diversity and choice. Lots are of a size and dimension which is appropriate to the area given its location and the types of existing allotments in the area. The majority of lots proposed will be located within 400m of existing bus stops on Bogong Avenue. No lots of 300sqm of smaller are proposed. The site is not located within 400m walking distance of an activity centre.
To provide higher housing densities within walking distance of activity centres.	*Lot sizes and mix should achieve the average net residential density specified in any zone or overlay that applies to the land or in any relevant policy for the area set out in this scheme.*	N/A	
To achieve increased housing densities in designated growth areas.	*A range and mix of lot sizes should be provided including lots suitable for the development of:* • *Single dwellings* • *Two dwellings or more.* • *Higher density housing.* • *Residential buildings and Retirement Villages*	Yes	
To provide a range of lot sizes to suit a variety of dwelling and household types.	*Unless the site is constrained by topography or other site conditions, lot distribution should provide for 95 per cent of dwellings to be located no more than 400 metre street walking distance from the nearest existing or proposed bus stop, 600 metres street walking distance from the nearest existing or proposed tram stop and 800 metres street walking distance from the nearest existing or proposed railway station.*	Yes	
	Lots of 300sqm or less in area, lots suitable for development of two dwellings or more, lots suitable for higher density housing and lots suitable for Residential buildings and Retirement villages should be located in and within 400 metres street walking distance of an activity centre.	N/A	
56.04-2 Lot area and building envelopes Obj	**Standard C8**	**Met**	**Comments**
To provide lots with areas and dimensions that enable the appropriate siting and construction of a dwelling, solar access, private open space, vehicle access and parking, water management, easements and the retention of significant vegetation and site features.	*An application to subdivide land that creates lots of less than 300sqm should be accompanied by information that shows:* • *That the lots are consistent or contain a building envelope that is consistent with a development approved under this scheme, or* • *That a dwelling may be constructed on each lot in accordance with the requirements of this scheme.*	N/A	The proposed lots range in size from 413sqm to 934sqm. Each lot is sufficiently sized and has appropriate dimensions to contain a building envelope of 10m by 15m. The proposed subdivision layout facilitates the retention of existing vegetation along the western site boundary.
	Lots of between 300sqm and 500sqm should: • *Contain a building envelope that is consistent with a development of the lot approved under this scheme, or*	Yes	

	• *If no development of the lot has been approved under this scheme, contain a building envelope and be able to contain a rectangle measuring 10m x 15m, or 9m x15m if a boundary wall is nominated as part of the building envelope*		
	If lots of between 300sqm and 500sqm are proposed to contain buildings that are built to the boundary, the long axis of the lots should be within 30^{0}E and 20^{0}W of N unless there are significant physical constraints that make this difficult to achieve.	N/A	
	Lots greater than 500sqm in area should be able to contain a rectangle measuring 10m x 15m, and may contain a building envelope.	Yes	
	A building envelope may specify or incorporate any relevant siting and design requirement. Any requirement should meet the relevant standards of Clause 54, unless: • *The objectives of the relevant standard are met, and* • *The building envelope is shown as a restriction on a plan of subdivision registered under the Subdivision Act 1988, or is specified as a covenant in an agreement under Section 173 of the Act.*	N/A	
	Where a lot with a building envelope adjoins a lot that is not on the same plan of subdivision or is not subject to the same agreement relating to the relevant building envelope: • *The building envelope must meet Standards A10 and A11 and Clause 54 in relation to the adjoining lot, and* • *The building envelope must not regulate siting matters covered by Standards A12 to A15 (inclusive) of Clause 54 in relation to the adjoining lot. This should be specified in the relevant plan of subdivision or agreement.*	N/A	
	Lot dimensions and building envelopes should protect: • *Solar access for future dwellings and support the siting and design of dwellings that achieve the energy rating requirements of the Building Regulations.* • *Existing or proposed easements on lots.* • *Significant vegetation and site features.*	Yes	
56.04-3 Solar orientation objective	**Standard C9**	**Met**	**Comments**
To provide good solar orientation of lots and solar access for future dwellings	*Unless the site is constrained by topography or other site conditions, at least 70 percent of lots should have appropriate solar orientation.*	Yes	All proposed lots are within the range north 20 degrees west to north 30 degrees east, or east 20 degrees north to east 30 degrees south, to maximise solar efficiency.
	Lots have appropriate solar orientation when: • *The long axes of lots are within the range N20^{0}W to N30^{0}E, or E20^{0}N to E30^{0}S.* • *Lots between 300sqm and 500sqm are proposed to contain dwellings that are*	Yes	

	built to the boundary, the long axis of the lots should be within N20^{0}W to N30^{0}E. • *Dimensions of lots are adequate to protect solar access to the lot, taking into account likely dwelling size and the relationship of each lot to the street.*		
56.04-4 Street orientation objective	**Standard C10**	**Met**	**Comments**
To provide a lot layout that contributes to community social interaction, person safety and property security.	*Subdivision should increase visibility and surveillance by:* • *Ensuring lots front all roads and streets and avoid the side and rear lots being orientated to connector streets and arterial roads.* • *Providing lots of 300sqm or less in area and lots for 2 or more dwellings around activity centres and public open space.* • *Ensuring streets and houses look onto public open space and avoiding sides and rears of lot along public open space boundaries.*	Yes	All proposed lots will have a frontage onto a new road. No lots of 300sqm or less are proposed. Two areas of public open space are proposed, and each will be adjoined by a street, and will be overlooked by lots, thus facilitating casual surveillance.
56.04-5 Common area objective	**Standard C11**	**Met**	**Comments**
To identify common areas and the purpose for which the area is commonly held. *To ensure the provision of common area is appropriate and that necessary management arrangements are in place.* *To maintain direct public access throughout the neighbourhood street network.*	*An application to subdivide land that creates common land must be accompanied by a plan and a report identifying:* • *The common area to be owned by the body corporate, including any streets and open space.* • *The reasons why the area should be commonly held.* • *Lots participating in the body corporate.* • *The proposed management arrangements including maintenance standards for streets and open spaces to be commonly held.*	N/A	**No common areas are proposed as part of the subdivision.**

56.05-1 Integrated urban landscape objectives	**Standard C12**	**Met**	**Comments**
To provide attractive and continuous landscaping in streets and public open spaces that contribute to the character and identity of new neighbourhoods and urban places or to existing or preferred neighbourhood character in existing urban areas. *To incorporated natural and cultural features in the design of streets and public open space where appropriate.* *To protect and enhance native habitat and discourage the planting and spread of noxious weeds.*	*An application for subdivision that creates streets or public open space should be accompanied by a landscape design.* *The landscape design should:* • *Implement any relevant streetscape, landscape, urban design or native vegetation precinct plan, strategy or policy for the area set out in this scheme.* • *Create attractive landscapes that visually emphasise streets and public spaces.* • *Respond to the site and context description for the site and surrounding area.* • *Maintain significant vegetation where possible within an urban context.* • *Take account of the physical features of the land including landform, soil and climate.*	TBC	No landscape plan has been provided, however, this will be secured by a condition on permit.

To provide integrated water management systems and contribute to drinking water conservation.	• *Protect and enhance any significant natural and cultural features.* • *Protect and link areas of significant local habitat where appropriate.* • *Support integrated water management systems with appropriate landscape design techniques for managing urban run-off including wetlands and other water sensitive urban design features in streets and public open space.* • *Promote the use of drought tolerant and low maintenance plants and avoid species that are likely to spread to the surrounding environment.* • *Ensure landscaping supports surveillance and provides shade in streets, parks and public open space.* • *Develop appropriate landscape for the intended use of public open space including areas for passive and active recreation, the exercising of pets, playgrounds and shaded areas.* • *Provide for walking and cycling networks that link with community facilities.* • *Provide appropriate pathways, signage, fencing, public lighting and street furniture.* • *Create low maintenance, durable landscapes that are capable of a long life.* • *The landscape design must include a maintenance plan that sets out maintenance responsibilities, requirements and costs.*		
56.05-2 Public Open Space provision objectives	**Standard C13**	**Met**	**Comments**
To provide a network of quality, well-distributed, multi-functional and cost-effective public open space that includes local parks, active open space, linear parks and trails, and links to regional open space. *To provide a network of public open space that caters for a broad range of users.* *To encourage healthy and active communities.* *To provide adequate unencumbered land for public open space and integrate any encumbered land with the open space network.*	*The provision of public open space should:* • *Implement any relevant objective, policy, strategy or plan (including any growth area precinct structure plan) for open space set out in this scheme.* • *Provide a network of well-distributed neighbourhood public open space that includes:* o *Local parks within 400 metres safe walking distance of at least 95 percent of all dwellings. Where not designed to include active open space, local parks should be generally 1 hectare in area and suitably dimensioned and designed to provide for their intended use and to allow easy adaptation in response to changing community preferences.* o *Additional small local parks or public squares in activity centres and higher density residential areas.* • *Active open space of a least 8 hectares in area within 1 kilometre of 95 percent of all dwellings that is:*	Yes	The proposal provides two public open space reserves, which equates to 7% of the site area. All proposed lots will be located within 400m walking distance of at least one of the proposed public open space reserves.

To ensure land provided for public open space can be managed in an environmentally sustainable way and contributes to the development of sustainable neighbourhoods.	o *Suitably dimensioned and designed to provide for the intended use, buffer areas around sporting fields and passive open space* o *Sufficient to incorporate two football/cricket ovals* o *Appropriate for the intended use in terms of quality and orientation* o *Located on flat land (which can be cost effectively graded)* o *Located with access to, or making provision for, a recycled or sustainable water supply* o *Adjoin schools and other community facilities where practical* o *Designed to achieve sharing of space between sports.* o *Linear parks and trails along waterways, vegetation corridors and road reserves within 1 km of 95 percent of all dwellings.* *Public open space should:* • *Be provided along foreshores, streams and permanent water bodies.* • *Be linked to existing or proposed future public open spaces where appropriate.* • *Be integrated with floodways and encumbered land that is accessible for public recreation.* • *Be suitable for the intended use.* • *Be of an area and dimensions to allow easy adaptation to different uses in response to changing community active and passive recreational preferences.* • *Maximise passive surveillance.* • *Be integrated with urban water management systems, waterways and other water bodies.* • *Incorporate natural and cultural features where appropriate.*		

56.06-2 Walking and cycling network objective	**Standard C15**	**Met**	**Comments**
To contribute to community health and well being by encouraging walking and cycling as part of the daily lives of residents, employees and visitors. *To provide safe and direct movement through and between neighbourhoods by pedestrians and cyclists.* *To reduce car use, greenhouse gas emissions and air pollution.*	*The walking and cycling network should be designed to:* • *Implement any relevant regional and local walking and cycling strategy, plan or policy for the area set out in this scheme.* • *Link to any existing pedestrian and cycling networks.* • *Provide safe walkable distances to activity centres, community facilities, public transport stops and public open spaces.* • *Provide an interconnected and continuous network of safe and efficient and convenient footpaths, shared paths, cycle paths and cycle lanes based primarily on*	Yes	Footpath infrastructure will be provided in front of every allotment along with a nature strip of a minimum 2.5 metres width. This will be secured by condition on permit. The development will link to existing pedestrian and cycling networks.

	the network of arterial roads, neighbourhoods streets and regional public open spaces. • *Provide direct cycling routes for regional journeys to major activity centres, community facilities, public transport and other regional activities and for regional recreational cycling.* • *Ensure safe street and road crossings including the provision for traffic controls where required.* • *Provide an appropriate level of priority for pedestrians and cyclists.* • *Have natural surveillance along streets and from abutting dwellings and be designed for personal safety and security particularly at night.* • *Be accessible to people with disabilities.*		
56.06-3 Public Transport Network Objectives	**Standard C16**		
To provide an arterial road and neighbourhood street network that supports a direct, efficient and safe public transport system. *To encourage maximum use of public transport.*	*The public transport network should be designed to:* • *Implement any relevant public transport strategy, plan or policy for the area set out in this scheme.* • *Connect new public transport routes to existing and proposed routes to the satisfaction of the relevant public transport authority.* • *Provide for public transport links between activity centres and other locations that attract people using the Principal Public Transport Network in Metropolitan Melbourne and the regional public transport network outside Metropolitan Melbourne.* • *Locate regional bus routes principally on arterial roads and locate local bus services principally on connector streets to provide:* o *Safe & direct movement between activity centres without complicated turning manoeuvres.* o *Direct travel between neighbourhoods and neighbourhood activity centres.* o *A short and safe walk to a public transport stop from most dwellings.*	Yes	The proposed subdivision will have good access to existing public transport facilities, including bus routes on Bogong Avenue, Wicklow Drive and Creswick Road Internal road layout will require amendment by condition to allow minimum of 18m width.
56.06-4 Neighbourhood street network objective	**Standard C17**	**Met**	**Comments**
To provide for direct, safe and easy movement through and between neighbourhoods for pedestrians, cyclists, public transport and other motor vehicles using the neighbourhood street network.	*The neighbourhood street network must:* • *Take account of the existing mobility network of arterial roads, neighbourhood streets, cycle paths, footpaths and public transport routes.* • *Provide clear physical distinctions between arterial roads and neighbourhood street types.*	Yes	Provision has been made for road connections to existing and proposed road networks. Footpaths will be constructed, as required, in accordance with Council requirements and specifications.

	• *Comply with the Roads Corporation's arterial road access management policies.* • *Provide an appropriate speed environment and movement priority for the safe and easy movement of pedestrians and cyclists and for accessing public transport.* • *Provide safe and efficient access to activity centres for commercial and freight vehicles.* • *Provide safe and efficient access to all lots for service and emergency vehicles.* • *Provide safe movement for all vehicles.* • *Incorporate any necessary traffic control measures and traffic management infrastructure.*		The proposed eastern road will act as an access street carrying traffic between Bogong Avenue and Heinz Lane.
	The neighbourhood street network should be designed to: • *Implement any relevant transport strategy, plan or policy for the area set out in this scheme.* • *Include arterial roads at intervals of approximately 1.6km that have adequate reservation widths to accommodate long term movement demand.* • *Include connector streets approximately halfway between arterial roads and provide adequate reservation widths to accommodate long term movement demand.* • *Ensure connector streets align between neighbourhoods for direct and efficient movement of pedestrians, cyclists, public transport and other motor vehicles.* • *Provide and interconnected and continuous network of street within and between neighbourhoods for use by pedestrians, cyclists, public transport and other vehicles.* • *Provide an appropriate level of local traffic dispersal.* • *Indicate the appropriate street type.* • *Provide a speed environment that is appropriate to the street type.* • *Provide a street environment that appropriately management movement demand (volume, type and mix of pedestrians, cyclists, public transport and other motor vehicles).* • *Encourage appropriate sharing of access lanes and access places by pedestrians, cyclists and vehicles.* • *Minimise the provision of culs-de-sac.* • *Provide for service and emergency vehicles to safely turn at the end of a dead-end street.* • *Facilitate solar orientation of lots.* • *Facilitate the provision of the walking and cycling network, integrated water*	Yes	

	management systems, utilities and planting of trees. • *Contribute to the area's character and identity.* • *Take account of any identified significant features.*		
56.06-5 Walking and cycling network detail objective	**Standard C18**	**Met**	**Comments**
To design and construct footpaths, shared path and cycle path networks that are safe, comfortable, well constructed and accessible for people with disabilities. *To design footpaths to accommodate wheelchairs, prams, scooters and other footpath bound vehicles.*	*Footpaths, shared paths, cycle paths and cycle lanes should be designed to:* • *Be part of a comprehensive design of the road or street reservation.* • *Be continuous and connect.* • *Provide for public transport stops, street crossings for pedestrians and cyclists and kerb crossovers for access to lots.* • *Accommodate projected volumes and mix.* • *Meet the requirements of Table C1.* • *Provide pavement edge, kerb, channel and crossover details that support safe travel for pedestrians, footpath bound vehicles and cyclists, perform required drainage functions and are structurally sound.* • *Provide appropriate signage.* • *Be constructed to allow access to lots without damage to footpath or shared path surfaces.* • *Be constructed with a durable, non-skid surface.* • *Be of a quality and durability to ensure:* ▪ *Safe passage for pedestrians, cyclists, footpath bound vehicles and vehicles.* ▪ *Discharge of urban run-off.* ▪ *Preservation of all weather access.* ▪ *Maintenance of a reasonable, comfortable riding quality.* ▪ *A minimum 20 year life space.* • *Be accessible to people with disabilities and include tactile ground surface indicators, audible signals and kerb ramps required for the movement of people with disabilities.*	Yes	The development will provide walking and cycling paths to connect to existing walking and cycling infrastructure on the south side of Heinz Lane and the east side of Creswick Road. This will be secured by condition on permit.
56.06-7 Neighbourhood street network detail obj	**Standard C20**	**Met**	**Comments**
To design and construct street carriageways and verges so that the street geometry and traffic speed provide an accessible and safe neighbourhood street system for all users.	*The design of streets and roads should:* • *Meet the requirements of Table C1. Where the widths of access lanes, access places, and access streets do not comply with the requirements of Table C1, the requirements of the relevant fire authority and roads authority must be met.* • *Provide street blocks that are generally between 120m and 240m in length and generally between 60m and 120m in width to facilitate pedestrian movement and control traffic speed.*	Yes	Internal road layout will require amendment by condition to allow minimum of 18m width.

	• *Have verges of sufficient width to accommodate footpaths, shared paths, cycle paths, integrated water management, street tree planting, lighting and utility needs.*
	• *Have street geometry appropriate to the street type and function, the physical land characteristics and achieve a safe environment for all users.*
	• *Provide a low-speed environment while allowing all road users to proceed without inconvenience or delay.*
	• *Provide a safe environment for all street users applying speed control measures where appropriate.*
	• *Ensure intersection layouts clearly indicate the travel path and priority movement for pedestrians, cyclists and vehicles.*
	• *Provide a minimum 5m by 5m corner splay at junctions with arterial roads and a minimum 3m by 3m corner splay at other junctions unless site conditions justify a variation to achieve safe sight lines across corners.*
	• *Ensure street are sufficient strength to:*
	  ▪ *Enable the carriage of vehicles.*
	  ▪ *Avoid damage by construction vehicles and equipment.*
	• *Ensure street pavements are of sufficient quality and durability for the:*
	  ▪ *Safe passage of pedestrians, cyclists and vehicles.*
	  ▪ *Discharge of urban run-off. Preservation of all-weather access and maintenance of a reasonable, comfortable riding quality.*
	• *Ensure carriageways of planned arterial roads are designed to the requirements of the relevant road authority.*
	• *Ensure carriageways of neighbourhood streets are designed for a minimum 20 year life span.*
	• *Provide pavement edges, kerbs, channel and crossover details designed to:*
	  ▪ *Perform the required integrated water management functions.*
	  ▪ *Delineate the edge of the carriageway for all street users.*
	  ▪ *Provide efficient and comfortable access to abutting lots at appropriate locations.*
	  ▪ *Contribute to streetscape design.*
	• *Provide for the safe and efficient collection of waste and recycling materials from lots.*
	• *Be accessible to people with disabilities.*		

	A street detail plan should be prepared that shows, as appropriate: • *The street hierarchy and typical cross-sections for all street types.*	N/A	

	• *Location of carriageway pavement, parking, bus stops, crossovers, footpaths, tactile surface indicators, cycle paths and speed control and traffic management devices.* • *Water sensitive urban design features.* • *Location and species of proposed street trees and other vegetation.* • *Location of existing vegetation to be retained and proposed treatment to ensure its health.* • *Any relevant details for the design and location of street furniture, lighting, seats, bus stops, telephone boxes and mailboxes.*		
56.06-8 Lot access objective	**Standard C21**	**Met**	**Comments**
To provide for safe vehicle access between roads and lots.	*Vehicle access to lots abutting arterial roads should be provided from service roads, side or rear lanes, access places or access streets where appropriate and in accordance with the access management requirements of the relevant roads authority.*	Yes	All lots will be provided with vehicle crossovers to Council's required specifications and the requirements of the road authority. No lots of 300sqm of less are proposed.
	Vehicle access to lots of 300sqm or less in area and lots with frontage of 7.5m or less should be provided via rear or side access lanes, places or streets.	N/A	
	The design and construction of a crossover should meet the requirements of the relevant road authority.	Yes	

56.07-1 Drinking water supply objective	**Standard C22**	**Met**	**Comments**
To reduce the use of drinking water *To provide adequate, cost-effective supply of drinking water*	*The supply of drinking water must be:* • *Designed and constructed in accordance with the requirements and to the satisfaction of the relevant water authority.* • *Provided to the boundary of all lots in the subdivision to the satisfaction of the relevant water authority*	Yes	The supply of drinking water to each lot will be from the existing reticulated water supply mains in accordance with the requirements of Central Highlands Water. A condition on the permit to require this will be included.
56.07-2 Reused and recycled water objective	**Standard C23**	**Met**	**Comments**
To provide for the substitution of drinking water for non-drinking water purposes with reused and recycled water,	*Reused and recycled water supply systems must be:* • *Designed and constructed in accordance with the requirements and to the satisfaction of the relevant water authority, Environment Protection Authority and Department of Health and Human Services.* • *Provided to the boundary of all lots in the subdivision where required by the relevant water authority.*	N/A	No recycled or reused water usage is proposed. No objection raised by CHW.
56.07-3 Waste water management objective	**Standard C24**	**Met**	**Comments**

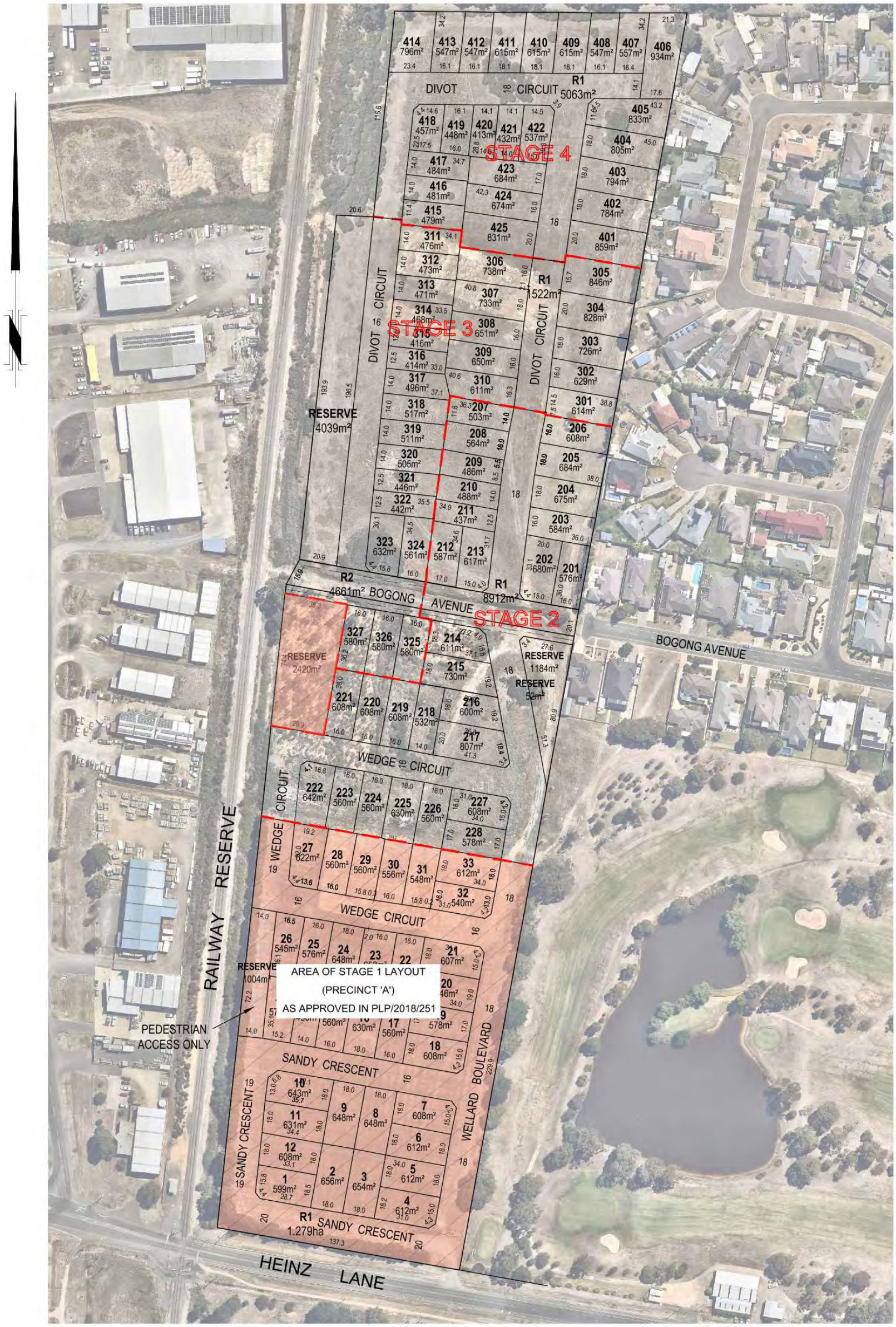
To provide a waste water system that is adequate for the maintenance of public health and the management of effluent in an environmentally friendly manner.	*Waste water systems must be:* • *Designed, constructed and managed in accordance with the requirements and to the satisfaction of the relevant water authority and the Environmental Protection Authority.* • *Consistent with any relevant approved domestic waste water management plan.*	Yes	Central Highlands Water has advised that reticulated sewerage facilities must be provided to each lot by the owner of the land (or applicant, in anticipation of becoming the owner) to the satisfaction of the Central Highlands Water. This will include the construction of works and the payment of major works contributions by the applicant. This will be secured by condition on permit.
	Reticulated waste water must be provided to the boundary of all lots in the subdivision where required by the relevant water authority.	Yes	
56.07-4 Urban run-off management objective	**Standard C25**	**Met**	**Comments**
To minimise damage to properties and inconvenience to residents from urban run-off.	*The urban stormwater management system must be:* • *Designed and managed in accordance with the requirements and to the satisfaction of the relevant drainage authority.* • *Designed and managed in accordance with the requirements and to the satisfaction of the water authority where reuse of urban run-off is proposed.* • *Designed to meet the current best practice performance objectives for stormwater quality as contained in the Urban Stormwater – Best Practice Environmental Management Guidelines (Victorian Stormwater Committee 1999) as amended.* • *Designed to ensure that flows downstream of the subdivision site are restricted to pre-development levels unless increased flows are approved by the relevant drainage authority and there are no detrimental downstream impacts.*	Yes	Council is satisfied with the drainage solutions proposed, as discussed in the body of this report. Any requirements set out by the relevant drainage authority will be included as a condition(s) of the permit.
To ensure that the street operates adequately during major storm events and provides for public safety.	*The stormwater management system should be integrated with the overall development plan including the street and public open space networks and landscape design.*	Yes	
To minimise increases in stormwater run-off and protect the environmental values and physical characteristics of receiving waters from degradation by urban run-off.	*For all storm events up to and including the 20% Average Exceedence Probability (AEP) standard:* • *Stormwater flows should be contained within the drainage system to the requirements of the relevant authority.* • *Ponding on roads should not occur for longer than 1 hour after the cessation of rainfall.*	Yes	
	For storm events greater than 20% AEP and up to and including 1% AEP standard: • *Provision must be made for the safe and effective passage of stormwater flows.* • *All new lots should be free from inundation or to a lesser standard of flood protection where agreed by the relevant floodplain management authority.*	Yes	

	• *Ensure that streets, footpaths and cycle paths that are subject to flooding meet the safety criteria d_a V_{ave} < 0.35m²/s (where, d_a = average depth in metres and V_{ave} = average velocity in metres per second).*		
	The design of the local drainage network should: • *Ensure run-off is retarded to a standard required by the responsible drainage authority.* • *Ensure that every lot is provided with drainage to a standard acceptable to the relevant drainage authority. Where possible, run-off should be directed to the front of the lot and discharged into the street drainage system or legal point of discharge.* • *Ensure that inlet and outlet structures take account of the effects of obstructions and debris build up. Any surcharge drainage pit should discharge into an overload flow in a safe and predetermined manner.* • *Include water sensitive urban design features to manage run-off in streets and public open space. Where such features are provided, an application must describe maintenance responsibilities, requirements and costs.*	Yes	
	Any flood mitigation works must be designed and constructed in accordance with the requirements of the relevant floodplain management authority.	Yes	

56.08-1 Site Management Objective	**Standard C26**	**Met**	**Comments**
To protect drainage infrastructure and receiving waters from sedimentation and contamination. *To protect the site and surrounding area from environmental degradation or nuisance prior to and during construction of subdivision works.* *To encourage the re-use of materials from the site and recycled materials in the construction of subdivisions where practicable.*	*A subdivision application must describe how the site will be managed prior to and during the construction period and may set out requirements for managing::* • *Erosion and sedimentation.* • *Dust* • *Run-off* • *Litter, concrete and other construction wastes.* • *Chemical contamination.* • *Vegetation and natural features planned for retention.*	No	Submission of a construction management plan has been included as a condition on permit.
	Recycled materials should be used for the construction of streets, shared paths and other infrastructure where practicable.	Yes	
56.09-1 Shared trenching objective	**Standard C27**	**Met**	**Comments**

To maximise the opportunities for shared trenching. *To minimise constraints on landscaping within street reserves.*	*Reticulated services for water, gas, electricity and telecommunications should be provided in shared trenching to minimise construction costs and land allocation for underground services.*	Yes	The applicant has confirmed shared trenching will be undertaken where possible. A condition will be included on the permit to require shared trenching, unless otherwise agreed with the Responsible Authority.
56.09-2 Electricity, telecommunications & gas	**Standard C28**	**Met**	**Comments**
To provide public utilities to each lot in a timely, efficient and cost effective manner. *To reduce greenhouse gas emissions by supporting generation and use of electricity from renewable sources.*	*The electricity supply system must be designed in accordance with the requirements of the relevant electricity supply agency and be provided to the boundary of all lots in the subdivision to the satisfaction of the relevant electricity authority.*	Yes	A standard condition will be included on the permit outlining the required relevant agreements with all service providers.
	Arrangements that support the generation or use of renewable energy at a lot or neighbourhood level are encouraged.	Yes	
	The telecommunication system must be designed in accordance with the requirements of the relevant telecommunications servicing agency and should be consistent with any approved strategy, policy or plan for the provision of advanced telecommunications infrastructure, including fibre optic technology. The telecommunications system must be provided to the boundary of all lots in the subdivision to the satisfaction of the relevant telecommunications servicing authority.	Yes	
	Where available, the reticulated gas supply system must be designed in accordance with the requirements of the relevant gas supply agency and be provided to the boundary of all lots in the subdivision to the satisfaction of the relevant gas supply agency.	Yes	

56.09-3 Fire hydrants objective	**Standard C29**	**Met**	**Comments**
To provide fire hydrants and fire plugs in positions that enable fire fighters to access water safely, effectively and efficiently.	*Fire hydrants should be provided:* • *A maximum distance of 120 metres from the rear of each lot.* • *No more than 200 metres apart*	Yes	The CFA's requirements for hydrants have been secured by condition.
	Hydrants and fire plugs must be compatible with the relevant fire service authority.	Yes	
56.09-4 Public lighting objective	**Standard C30**	**Met**	**Comments**
To provide public lighting to ensure the safety of pedestrians, cyclists and vehicles.	*Public lighting should be provided to streets, footpaths, public telephones, public transport stops and to major pedestrian and cycle paths including public open spaces that are likely to be well used at night to assist in providing safe passage for pedestrians, cyclists and vehicles.*	Yes	Installation of public street lighting will be secured by condition.



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Rev.	Date	Amendments
14	18/12/2020	REV. STAGE BDY
10-13	20/11/2020	REV. LOT DIMENSIONS/LAYOUT
09	18/05/2020	REV. LOT DIMENSIONS/LAYOUT
08	18/05/2020	REV. LOT DIMENSIONS/LAYOUT
07	12/03/2020	REV. LOT DIMENSIONS/LAYOUT
06	13/08/2019	PROP. ROAD NAMES ADDED
05	24/07/2019	REMOVE NOTATION

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PF	File Ref.	17547-08-PP01(2-4)-14
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Client: VILLAWOOD PROPERTIES
Municipality: CITY OF BALLARAT
20 0 20 40 60 80 100
Scale in Metres

PLAN OF PROPOSED SUBDIVISION LAYOUT PRECINCT 'B' HEINZ LANE INVERMAY PARK

330 Heinz Lane, Invermay Park

Acoustic Assessment

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7	4/08/2021	20180001.2/0408A/R7/BAW	BAW	SG	BAW

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1 INTRODUCTION

This report presents our assessment of noise intrusion into the Lot 1 Drew's Paddock residential development located on Heinz Lane, Invermay Park. The assessment has addressed the following external noise intrusion:

- Traffic noise from Western Freeway located north of subject site.
- Noise from the train line located west of subject site.
- Noise from the industrial precinct located west of subject site.
- Noise from the Boral Asphalt facility operation located to the north of the Western Freeway.

The following documentation has been referenced in the assessment.

Table 1 – Referenced Documents

Company	Document Reference	Date
City of Ballarat	Council RFI re: Planning Permit Application No. PLP/2019/546	31 July 2020

2 SITE DESCRIPTION

The overall development is an 11.02 hectares land located on Heinz Lane, Invermay Park. The north of subject site is bounded by Western Freeway, the east is bounded by existing residential development, the west is bounded by the Ballarat-Maryborough Railway, and the sound is south bounded by Heinz Lane. This report addresses the northern portion of the subject development (Lot 1) as indicated in Figure 1 below. We note that it is our understanding that the southern portion of the development (Lot 2) has been approved by Council, which will have a similar exposure to the noise emission from the western industrial area and the train line.

The noise level within the subject site is dominated by the traffic movement from the Western Freeway located North of subject site. It was also identified that the subject site is impacted by the train movements on the Ballarat-Maryborough Railway (which include V-line and freight trains) and the existing industrial precinct which are both located on the western side of the subject site. The industrial facilities and its operating hours have been identified as follows:

- Ballarat Joinery Supplies: 8am to 5pm (Monday to Friday) and 8:30am to 12pm (Saturday).
- Sheds N' Sails Pty Ltd: 8:30am to 4:30pm (Monday to Friday).
- A&J Auto Electrics: 8:30am to 5:30pm (Monday to Friday) and 9am to 12pm (Saturday).
- Natures Cargo: 8:30am to 6pm (Monday to Thursday), 8:30am to 5pm (Friday) and 8:30am to 12pm (Saturday).

Additionally, it has been identified that the existing Boral Asphalt facility is located approximately 150 metres north-west of the northern boundary of subject site. The facility operates from 7am to 5pm (Monday to Friday) and 7am to 1pm (Saturday).

Figure 1 below details the location of subject site and noise measurement locations.

Figure 1 – Subject site and surrounding site (source: Google Maps)

In addition, a natural berm with min 1.5 metre height will be incorporated along the Freeway as a continuation of the existing berm which are indicated in Figure 2 below.

Figure 2 – Extent of Berms

3 ENVIRONMENTAL NOISE DESCRIPTORS

Environmental noise constantly varies in level, due to fluctuations in local noise sources including road traffic. Accordingly, a 15-minute measurement interval is normally utilised. Over this period, noise levels are monitored on a continuous basis and statistical and integrating techniques are used to determine noise description parameters.

In the case of environmental noise three principle measurement parameters are used, namely L_{10}, L_{90} and L_{eq}.

The L_{10} and L_{90} measurement parameters are statistical levels that represent the average maximum and average minimum noise levels respectively, over the measurement intervals.

The L_{10} parameter is commonly used to measure noise produced by a particular intrusive noise source since it represents the average of the loudest noise levels produced by the source.

Conversely, the L_{90} level (which is commonly referred to as the background noise level) represents the noise level heard in the quieter periods during a measurement interval. The L_{90} parameter is used to set the allowable noise level for new, potentially intrusive noise sources since the disturbance caused by the new source depends on how audible it is above the pre-existing noise environment, particularly during quiet periods, as represented by the L_{90} level.

The L_{eq} parameter represents the average noise energy during a measurement period. This parameter is derived by integrating the noise levels measured over the measurement period. L_{eq} is important in the assessment of traffic noise impact as it closely corresponds with human perception of a changing noise environment; such is the character of industrial noise.

4 NOISE LEVEL MEASUREMENTS

Noise level measurements were conducted around the subject development to determine the traffic noise from the Western Freeway, noise emission from surrounding industrial precinct, and the train noise levels from the Ballarat-Maryborough Railway located west of subject development.

4.1 MEASUREMENT LOCATIONS

The attended and un-attended noise level measurements were conducted on the locations indicated in Figure 3 and detailed below.

Figure 3 – Noise level measurement locations (source: Google Maps)

The measurement locations are as the following:

- Location 1 – Un-attended noise monitor and attended measurement location to measure the traffic noise levels from Western Freeway. The monitor was installed in-line with the northern boundary of the subject development with the microphone of the monitor / sound level meter was located approximately 1.5 metres above grade.
- Location 2 – Attended noise level measurement location to measure the traffic noise levels from the Western Freeway. The microphone of the sound level meter was located approximately 1.5 metres above grade.
- Location 3 – Attended noise level measurement location to measure the traffic noise levels from the Western Freeway. The microphone of the sound level meter was located approximately 1.5 metres above grade.
- Location 4 – Attended noise level measurement location to measure the traffic noise levels from the Western Freeway and the noise emission from the Boral Asphalt facility. The microphone of the sound level meter was located approximately 1.5 metres above grade
- Location 5 – Attended noise level measurement location to measure the traffic noise levels from the Western Freeway. The microphone of the sound level meter was located approximately 1.5 metres above grade.

- Location 6 – Attended noise level measurement location to measure the traffic noise levels from the Western Freeway. The microphone of the sound level meter was located approximately 1.5 metres above grade

- Location 7 – Un-attended noise monitor and attended measurement location to measure the background noise levels, train noise levels and the industrial noise emission levels. The noise monitor was installed approximately 10 metres from the centre of the rail track with the microphone of the monitor / sound level meter was located approximately 1.5 metres above grade.

- Location 8 – Un-attended noise monitor location to measure the train noise levels and the industrial noise emission levels. The noise monitor was installed approximately 10 metres from the centre of the rail track with the microphone of the monitor / sound level meter was located approximately 1.5 metres above grade and approximately 10 metres from the centre of the rail track.

4.2 MEASUREMENT EQUIPMENT

The attended noise level measurements were conducted using a Norsonic Nor 140 and a Rion NL-42EX, and the un-attended noise monitoring was conducted using an ARL-315 and an Ngara noise monitor. The equipment was calibrated at the beginning and the end of the measurements using a Rion NC-74 Sound Calibrator; no significant drift was detected. All measurements were taken on a fast response mode.

4.3 MEASUREMENT DATE

The un-attended noise monitoring at locations 1 and 8 was conducted on site between 7 and 13 December 2017, and the attended traffic noise measurements were conducted on 7 and 13 December 2017.

The un-attended noise monitoring for background, train and industrial noise levels was conducted on site between 6 and 13 May 2020. The supplementary attended measurements were conducted on 6 and 13 May 2020.

Note that no traffic noise measurements were conducted during the May 2020 site visit as it was assumed that the traffic noise levels will not be representative due to the Covid restrictions. In any case, the potential increase of traffic noise levels has been included in the assessment based on the annual growth rate percentage provided to AL.

4.4 MEASURED NOISE LEVELS

This section details the results of noise level measurements conducted at the subject development. The noise level measurement locations are as indicated in Figure 3 above.

4.4.1 Traffic Noise Level

Table 2 – Un-attended Noise Monitor Measurements (Traffic Noise - Western Freeway)

Location	Measurement Date	Measured Traffic Noise Level from the Western Freeway dB(A) $L_{10(18\ hour)}$[1]
Location 1	7 December 2017	61
	8 December 2017	60
	9 December 2017	59
	10 December 2017	54
	11 December 2017	58
	12 December 2017	58

Note 1 – The noise level of 18 hours is based on the average noise level between 6am and midnight.

Table 3 – Attended Noise Level Measurements (Traffic Noise Western Freeway)

Measurements Date	Measurement Time	Measurement Location	Traffic Noise Level dB(A) L_{10}
7 December 2017	12:38pm – 12:53pm	Location 1	62
	12:59pm – 1:14pm	Location 2	62
	1:16pm – 1:31pm	Location 3	62
13 December 2017	12:05pm – 12:20pm	Location 4	71
	12:21pm – 12:36pm	Location 5	64
	12:38pm – 12:53pm	Location 6	64

4.4.2 Background Noise Levels

The background noise levels obtained on Location 7 is detailed in the table below.

Table 4 – Un-attended Noise Monitor Measurements (Ambient Noise) – Location 7

Period	Time	Measured Background dB(A) $L_{90,period}$
Day	7am – 6pm (Mon – Sat)	51
Evening	6pm – 10pm (Mon – Sat) 7am – 10pm (Sun)	46
Night	10pm – 7am	42

4.4.3 Train Noise Levels

The train noise levels has been measured by the un-attended noise monitor installed at Location 7 and was supplemented by an attended measurement at the same location. A minimum of 14 train pass-bys were identified throughout the noise monitoring period conducted at Location 7. Results are indicated in Table 5, 6 and 7 below.

Table 5 – Measured Train Noise Levels (Attended Measurements)

Measurement Location	Measured Noise Levels
Location 7	77 dB(A) L_{eq} 85 dB(A) L_{max}

Table 6 – Measured Train Noise Levels

Location	Time	Measured Noise Levels
Location 7	Day (6am-10pm)	58 dB(A) $L_{Aeq,16hr}$
	Night (10pm-6am)	54 dB(A) $L_{Aeq,8hr}$
	All period	92 dB(A) L_{max}[1]
Location 8	Day (6am-10pm)	57 dB(A) $L_{Aeq,16hr}$
	Night (10pm-6am)	51 dB(A) $L_{Aeq,8hr}$

Note 1: Train noise L_{max} is based on the 95th percentile of train pass-bys which is typically generated by horn blast. Refer Table 7 below for measured individual pass-bys.

Table 7 – Measured Train Pass-bys at Location 7 (L_{max})

Train Pass-by	Date	Time	Measured L_{max}
1	5/05/2021	Between 4pm and 4:15pm	92[1]
2		Between 6pm and 6:15pm	84
3	7/05/2021	Between 8pm and 8:15pm	92[1]
4	8/5/2021	Between 2am and 2:15am	92[1]
5		Between 11:45pm and 12:00am	82
6	9/5/2021	Between 1:15am and 1:30am	91[1]
7		Between 2:15am and 2:30am	92[1]
8		Between 8:15am and 8:30am	87
9	10/5/2021	Between 2am and 2:15am	90[1]
10		Between 8am and 8:15am	92[1]
11		Between 9:15am and 9:30am	91[1]
12	11/5/2021	Between 4:30pm and 4:45pm	89
13	12/5/2021	Between 5:15pm and 5:30pm	91[1]
14		Between 11:00pm and 11:15pm	83

Note 1: Assumed to be freight train pass-bys based on noise monitor audio playback.

4.4.4 Industrial Noise Levels

Noise from the existing industrial noise precinct (west of subject development) and the Boral Asphalt facility to the north was measured. Measured noise levels were obtained based on the un-attended noise monitors installed at Locations 7 and 8, and the attended measurement conducted at Location 4. We confirm that all facilities were in operation during site attendances. The table below indicates the measured noise levels.

Table 8 – Measured Industrial Noise Levels

Measurement Location	Noise Level L_{eq} dB(A)[1]
Location 4 – facing Boral Asphalt facility	Boral plant noise was inaudible[2]
Location 7 – facing industrial facility to the west	54 dB(A) $L_{eq,30mins}$ (7am-6pm)[3] Plant noise from the western industrial precinct was audible
Location 8 – facing industrial facility west	55 dB(A) $L_{eq,30mins}$ (7am-6pm) Plant noise from the western industrial precinct was audible

Note 1 – The noise data presented are based on the day-time period as the industrial facilities only operate during the day-time period.
Note 2 – The noise from the Boral Asphalt facility was inaudible due to the dominant traffic noise level at this location. An inspection closer to the facility indicate that the facility was in operation during time of inspection. Refer further discussion in Section 6.3.
Note 3 – The noise level presented excludes all measured noise levels impacted by the works undertaken within the Lot 2 development.

5 ASSESSMENT CRITERIA

5.1 EXTERNAL TRAFFIC NOISE CRITERIA FROM WESTERN FREEWAY

This assessment has been based on VicRoads' Requirements for Developers that derives its criteria from the Traffic Noise Reduction Policy, which states that:

> *"Category A: - For residential dwellings, aged persons homes, hospitals, motels, caravan parks and other buildings of a residential nature, the external noise level objective will be 63 dB(A) L10 (18hr) measured between 6 am and midnight;"*

In addition to this, the VicRoads' document *"Interpretation and Application of VicRoads Traffic Noise Reduction Policy 2005"* states the following:

> *"The receptor point, where modelling for noise barriers and measurements are undertaken at a noise sensitive building, is the centre of the window of the most exposed external façade facing the traffic noise. The receptor point will be at the lowest habitable level of the building. This is due to ease of measurement, and because noise is generally louder at the lower level. Also the 63dB(A) level is aimed at achieving acceptable outdoor levels, which generally occurs at ground level."*

Accordingly, the analysis detailed in Section 6 have been calculated to achieve an external noise level due to traffic of less than 63dB(A) $L_{10\ (18\ Hour)}$ when measured at the centre of windows on the lowest level (ground floor) of the development. Criteria are presented in Table 9 below.

Table 9 – Noise Level Criteria for all Lots

Location	External Noise Criteria dB(A) $L_{10(18hr)}$
All Lots	≤63[1,2]

Note 1: As measured 1 metre from the façade of any dwelling and at the centre of windows on the lowest level (ground floor) of the development.
Note 2: Criteria to be met of at least 10 years from anticipated completion of the development.

5.2 TRAIN NOISE LEVEL CRITERIA FROM THE BALLARAT-MARYBOROUGH RAILWAY

The following noise level criteria have been adopted to assess the train noise level from the nearby Ballarat-Maryborough Railway Line. We note that the nearest future dwellings located closest to the train line are lots 222 and 414 which are located approximately 36 metres and 45 metres from the centre of the track, respectively. On this basis, it is expected that vibration level will not be an issue for future dwellings and therefore not assessed.

5.2.1 Passenger Rail Infrastructure Noise Policy

The Victorian Government has published the Passenger Rail Infrastructure Noise Policy dated April 2013. The following are nominated in Section 8 of the Policy. The below detail the recommended threshold levels where investigation of noise levels should be conducted for change in use near an existing rail corridor which is applicable for this development.

Table 10 – Investigation Threshold(s) For Change in Land Use – Railway Noise - Airborne

Period	Threshold Level[1]
Day (6am – 10pm)	65 L_{Aeq} or 85 L_{Amax} (External)
Night (10pm – 6am)	60 dBL_{Aeq} or 85 L_{Amax} (External)

Note 1 - The L_{Amax} value is derived as the maximum A-weighted noise level and is the 95-percentile of the highest value of the A-weighted sound pressure level within the day or night. The L_{Aeq} means the equivalent continuous A-weighted sound pressure level determined over the measurement period. In this instance it is the level measured between 10pm and 6am during the night-time ($L_{Aeq,8hr}$) and between 6am and 10pm during the day time (or $L_{Aeq,16hr}$).

5.2.2 Victoria - Regional Rail Link

Although technically not applicable to this development, the noise level criteria based on the Regional Rail Link has been adopted to provide further amenity for the future residents. The Regional Rail Link design criteria has a limit of 65 dB(A) L_{Amax} and 40 dB(A) $L_{Aeq,9hr}$ for new developments as the internal design criteria where external threshold levels (detailed in Table 10 above) are exceeded. Based on the above, the internal train noise level criteria to applicable dwellings (within the zones of influence) are indicated below.

Table 11 - Internal Railway Noise Level Criteria for Dwellings within Zones of Influence

Area	Time	Criteria
Bedrooms	Night (10pm-7am)	40 $L_{Aeq,9hr}$ dB(A) 65 L_{max} dB(A)

Note 1: Noise levels are measured internally with the windows / façade closed.

In addition, we note that a maximum of 1 train movement is scheduled for night-time period between 10pm and 7am which is verified in the measured train noise levels detailed in Table 7. Note that one or two noise events per night with maximum internal noise levels of 65–70 dB(A) is not likely to affect health and wellbeing significantly.

5.3 INDUSTRIAL NOISE PRECINT NOISE CRITERIA

To address the noise intrusion from existing surrounding industrial precinct operation, the noise emission has been assessed against EPA 1826.4. The subject site is located outside of the Melbourne Metropolitan area however is within the Ballarat major urban area, and therefore the criteria has been developed based on EPA 1826.4 Part 1 (Noise limits – urban area method).

EPA 1826.4 "Noise limit and assessment protocol for the control of noise from commercial, industrial and trade premises and entertainment venues" document details the methodology to be used in assessing environmental noise emissions such that protection of residential amenity may be preserved. EPA 1826.4 are statutory instruments that are required to be complied with both private individuals and public and private sector organisations. EPA 1826.4 Part 1 (Noise limits – urban area method) includes both Schedule A and B that provide procedures to measure noise from premises and to determine noise emission limits respectively. To determine the assessment criteria both the 'Zoning' level and background noise levels are required to determine if the background noise level is neutral, high or low.

5.3.1 Zoning Level

The 'Zoning' level is determined by the Influencing Factor (IF) and is calculated by the formula nominated in Part 1 A.1.2 of EPA 1826.4. The IF is calculated from the proportion of industrial and commercial land around noise sensitive areas. Review of the surrounding area indicates an IF of approximately:

- Area 1 (future dwellings on the west and centre of the subject site): IF of 0.40
- Area 2 (row of future dwellings on the east of the subject site): IF of 0.02

which results in the Zoning limits detailed in the table below.

Table 12 – Zoning Levels

Period	Area 1 Zoning Level dB(A) L_{eq}	Area 2 Zoning Level dB(A) L_{eq}
Day time	57	51
Evening	51	45
Night time	46	40

5.3.2 Noise Limits

The environmental noise limits applicable to the development have been summarised in the table below in accordance with EPA 1826.4 Part 1.

Table 13 – Environmental Noise Limits

Period	Time	Background dB(A) $L_{90,period}$	Zoning limit	Classification	EPA 1826.4 Part 1 Criteria dB(A) L_{eq}
Area 1					
Day	7am – 6pm (Mon – Sat)	51[1]	57	Neutral	**57**
Evening	6pm – 10pm (Mon – Sat) 7am – 10pm (Sun)	46[1]	51	Neutral	**51**
Night	10pm – 7am	42[1]	46	Neutral	**46**
Area 2					
Day	7am – 6pm (Mon – Sat)	38-44[2]	51	Neutral	**51**
Evening	6pm – 10pm (Mon – Sat) 7am – 10pm (Sun)	35-41[2]	45	Neutral	**45**
Night	10pm – 7am	30-36[2]	40	Neutral	**40**

Note 1 - Based on the measured noise levels detailed in Table 4.
Note 2 – Assumed neutral background.

5.4 INTERNAL TRAFFIC NOISE LEVEL CRITERIA

As there are no internal noise criteria contained within any VicRoads documents or policies, Australian Standard 3671-1989 – *Road Traffic Noise Intrusion – Building Siting and Construction* (AS3671-1989) becomes the subject of application. AS3671 recommends that Australian Standard 2107:2016 – *Recommended Design Sound Levels and Reverberation Times for Building Interiors* be used in determining internal noise goals. The table below details the internal noise goals shall be achieved for future residential dwellings within the subject development.

Table 14 – Internal Noise Level Criteria

Rooms	Internal Noise Goal dB(A) L_{eq}[1]
Bedrooms	35-40 dB(A) $L_{eq,9hr}$ – 7am to 10pm
Living Areas	35-45 dB(A) $L_{eq,15hr}$ – 10pm to 7am

Note 1: With façade (windows and doors) closed and rooms fully furnished.

6 NOISE LEVEL ANALYSIS

6.1 WESTERN FREEWAY TRAFFIC NOISE LEVEL MODELLING

6.1.1 Traffic Noise Levels

The measured traffic noise levels from the un-attended noise monitor installed on Measurement Location 1 which has been compared with the predicted traffic noise level using the Calculation of Road Traffic Noise (CoRTN) in Table 15 below. The modelling has been based on a two ways AADT of 17,000 and 20% of heavy vehicles obtained from the Department of Transport's Open Data Hub website for the year 2020.

Table 15 – Traffic Noise Levels at 'Measurement Location 1'

Location	Measured Traffic Noise Levels in 2017 dB(A) $L_{10,18hours}$	Predicted Traffic Noise Levels using CoRTN Modelling for 2020 dB(A) $L_{10,18hours}$
Measured Location 1 in Figure 2	Average: 59 Highest: 61	59

It is noted that the predicted $L_{10,18hr}$ traffic noise levels correlate with the average measured weekday traffic noise level at the monitoring Location 1. Notwithstanding this, the highest measured noise level in Table 2 of 61 dB(A) $L_{10,18hours}$ will be used for this assessment which is considered a more conservative assessment.

6.1.2 Future Traffic Flows

The anticipated year of completion for the site is expected to be 2032. ESR Transport Planning has advised that growth of the road network at the site location is approximately 1.6% pa. The following table presents the expected traffic flows and will form the basis of this assessment.

Table 16 – Predicted Future Traffic Count

Year	Western Freeway
2020	17,000
2032	20,567

Based on the predicted traffic flows for 2032 in the table above an increase of +0.8 dB has been predicted using CoRTN for the Western Freeway.

6.1.3 SoundPlan Modelling

A SoundPlan™ has been prepared to predict traffic noise levels throughout the subject site and has been conducted implementing the Calculation of Road Traffic Noise (CoRTN 1988) method. The SoundPlan™ modelling is presented in Appendix 1 for the traffic during an 18-hour period (6am to 12 midnight). The model has been based on the following:

1. The highest measured noise level 61dB(A) $L_{10,18hr}$ at Measurement Location 1 (as detailed in Table 15) and an increase of +0.8 dB due to future traffic flows in 2032 presented in the section above. Note this is considered as a more conservative assessment as it utilized the highest measured noise levels in lieu of the average.
2. Traffic volumes and heavy vehicle composition of 20%.
3. Distance separation.
4. Vehicle speed.
5. Shielding from natural structures.
6. Pavement surface.
7. Road gradient
8. Elevations Ground model is based on the Plan of Feature and Level Survey provided by TGM Group Ballarat dated 10 January 2018.
9. A min 1.5 high natural berms proposed as a continuation of the existing natural berm indicated in Figure 2.

Noise levels produced by vehicles travelling along Western Freeway were modelled for the ground level (1.5m) has been presented in Appendix 1 of this document.

6.2 TRAIN NOISE LEVEL ANALYSIS

The noise data presented in Tables 5 and 6 above have been utilized as the basis of the SoundPlan™ model to generate train noise level contours for the nearby rail corridor. The SoundPlan™ modelling of is presented in Appendix 2 for the predicted $L_{eq,}$ noise levels for day period (6am-10pm), night period (10pm-6am) and the L_{max} noise levels.

The L_{eq} noise level from train pass-bys have been modelled as a line source which was calibrated to the measured L_{eq} obtained at 'Measurement Location 8' in Figure 2. For each train pass-by, the L_{max} is typically generated by a horn blast. The horn blast has been modelled as a moving point source along the rail corridor which was calibrated to 92 dB(A) L_{max} at 'Measurement Location 8' of Figure 2.

The noise level predictions at the subject site have been conducted using a SoundPLAN™ noise modelling implementing the ISO 9613-2:1996 "Acoustics – Attenuation of Sound During Propagation Outdoors – Part 2: General Method of Calculation" noise propagation Standard.

We note that the nearest lot to the rail corridor is Lot 222, and therefore compliance at this location will ensure compliance elsewhere. The predicted noise levels at Lot 222 are presented in the table below.

Table 17 – Assessment of External Measured Train Noise Levels

Period	Predicted Noise levels at Lot 40 (External)	Established Threshold Level (External)	Complies
Day (6am – 10pm)	55 L_{Aeq}	65 L_{Aeq}	Yes
	85 L_{Amax}	85 L_{Amax}	Yes
Night (10pm – 6am)	51 dBL_{Aeq}	60 L_{Aeq}	Yes
	85 L_{Amax}	85 L_{Amax}	Yes

Based on the above, we confirm that the rail noise level from the Ballarat-Maryborough train line complies with the threshold noise level criteria detailed in the Passenger Rail Infrastructure Noise Policy.

Notwithstanding, refer the discussion in Section 7.2 for in-principle acoustic treatment recommendations to provide further amenity for the future residential dwellings.

6.3 INDUSTRIAL NOISE LEVEL ANALYSIS

The noise data presented in Section 4.4.4 has been used as the basis of the SoundPlan™ model to generate industrial noise level contours for the existing industrial precinct to the west of subject development. SoundPlan™ modelling is presented in Appendix 3 for predicted $L_{eq,1hrs,}$ noise levels for the day period.

The table below summarizes the predicted noise levels from the western industrial precinct at the closest and farthest lots. It is understood that all industrial facilities only operating during the day period only and therefore assessment has been conducted for the day-time period only. This is confirmed by the logging data via audio playback which indicate there is no industrial noise outside of the day period.

The assessment detailed in the table below has been conducted against the EPA 1826.4 Part 1criteria.

Table 18 – Western Industrial Noise Levels Assessment Against EPA 1826.4 Part 1

Lots	Predicted noise Levels (7am-6pm) dB(A) $L_{eq,30mins}$	EPA 1826.4 Part 1 Criteria (Day Period) dB(A) $L_{eq,30mins}$	Complies
222	54	57	Yes
221 & 327	53	57	Yes
311-323	52	57	Yes
415-418	52	57	Yes
414	52	57	Yes
202-205	<50[1]	51	Yes
305-306	<50[1]	51	Yes
401-405	<50[1]	51	Yes

Note 1 – It is expected that the noise levels at these lots will be lower due to future shielding from the future dwellings along the west of subject site.

Attended noise level measurement conducted at Location 4 (Figure 2) are the closest measurement location to the Boral Asphalt. Measurement at this location indicated that noise from operation of the plant was inaudible over the existing ambient noise dominated by traffic noise form the Western Freeway. Noise level measurements conducted in Location 1 to 6 (Figure 2) also indicated that noise from the Boral plant and industrial noise was dominated by the traffic noise along the Western Freeway and the Boral industrial noise was inaudible.

On that basis we confirm that operation of the Boral Asphalt facility as well as existing industrial area to the west complies with EPA 1826.4 Part 1 criteria during the day period. Notwithstanding, the acoustic treatment recommendations detailed in Section 7.3 will provide further amenity of the future residential dwellings.

7 DISCUSSION

7.1 TRAFFIC NOISE FROM WESTERN FREEWAY

The SoundPlan™ modelling presented in Appendix 1 indicates that the traffic noise from the Western Freeway complies with VicRoads requirements within the subject site at the lowest level of future dwellings (at 1.5 metre height). In addition, the predicted noise levels at 4.5 metres which would represent a second storey is also presented. Notwithstanding, refer the acoustic treatment recommendations in Section 7.3.

7.2 INDUSTRIAL NOISE

Compliance with EPA 1826.4 Part 1 criteria for operation of the industrial sites indicates no additional treatment is required. Notwithstanding, refer the acoustic treatment recommendations in Section 7.3.

7.3 FUTURE RESIDENTIAL DWELLINGS

Current traffic, train and industrial noise comply with nominated criteria. Notwithstanding it is recommended that the following be implemented for the following zones. No specific recommended acoustic treatment is required to be installed for lots outside Zones A and B.

Figure 4 – Recommended Acoustic Zones

7.3.1 Zone A

The subject lots should be reviewed by a suitably qualified acoustic consultant to ensure that internal noise objectives indicated in Tables 11 and 14 are achieved. In the first instance the following in principle comments are provided.

7.3.1.1 Glazing

Glazing to the north, south and western facade shall incorporate acoustic seals and be installed with either 10mm glass or an IGU incorporating a 10mm glazed component.

7.3.1.2 External walls

External walls that are not glazed are assumed to be of a masonry or brick veneer construction. It is recommended that lightweight external wall construction be avoided wherever possible and if adopted will require to be reviewed by a suitably qualified acoustic consultant once a building design has been developed.

7.3.1.3 Roof

Roof construction are assumed to be metal or concrete tiled pitch roof with suspended plasterboard ceiling or similar. The ceiling cavity located below lightweight roof shall incorporate nom 75mm thick 11kg/m^3 glasswool insulation.

For all roofs / ceilings the following in-principle treatment shall be implemented:

- Penetrations in ceilings (such as for light fittings, GPOs, etc.) must be sealed gap free with a flexible non hardening sealant (similar to Selleys Proseries Fireblock). Any ventilation openings into the roof cavity (for air conditioning & mechanical ventilation) would need to be acoustically treated, e.g. with a 90-degree sheet metal cushion head box internally lined with 25mm thick perforated foil faced insulation and connected to a minimum of 1 metre of insulated flexible duct.

- It is assumed all light fittings are surface mounted. If recessed downlights are used, they shall be non-gimballed type.

Detailed review of the roof / ceiling system requirements shall be carried out by a suitably qualified acoustic consultant once a building design has been developed.

7.3.1.4 Entry Doors

Entry doors to residential dwellings shall generally be constructed from solid core timber doors (nom 35mm thick or 6mm fully frames/glazed elements) with all gaps minimised.

7.3.1.5 Dormers

Any dormers are to be constructed from the same constructions as indicated in Section 7.3.1.3.

Detailed review of the dormer requirements shall be carried out by a suitably qualified acoustic consultant once a building design has been developed.

7.3.2 Zone B

The subject lots should be reviewed by a suitably qualified acoustic consultant to ensure that internal noise objectives indicated in Tables 11 and 14 are achieved. In the first instance the following in principle comments are provided.

7.3.2.1 Glazing Generally

Glazing to incorporate acoustic seals and be min 6mm glass or 6/12/6 IGU or alternative as approved by a qualified acoustic consultant

7.3.2.2 External Wall Construction

Lots 221, 327, 311 to 323, 415 to 418

External walls facing north, south and west that are not glazed are assumed to be of a masonry or brick veneer construction. It is recommended that lightweight external wall construction in those facades be avoided wherever possible and if adopted will require to be reviewed by a suitably qualified acoustic consultant once a building design has been developed.

Lots 406 to 413

External walls facing north, east and west that are not glazed are assumed to be of a masonry or brick veneer construction. It is recommended that lightweight external wall construction in those facades be avoided wherever possible and if adopted will require to be reviewed by a suitably qualified acoustic consultant once a building design has been developed.

7.3.2.3 Roof Construction

Roof construction are assumed to be metal or concrete tiled pitch roof with suspended plasterboard ceiling or similar. The ceiling cavity located below lightweight roof shall incorporate nom 75mm thick 11kg/m^3 glasswool insulation.

For all roofs / ceilings the following in-principle treatment shall be implemented:

- Penetrations in ceilings (such as for light fittings, GPOs, etc.) must be sealed gap free with a flexible non hardening sealant (similar to Selleys Proseries Fireblock). Any ventilation openings into the roof cavity (for air conditioning & mechanical ventilation) would need to be acoustically treated, e.g. with a 90-degree sheet metal cushion head box internally lined with 25mm thick perforated foil faced insulation and connected to a minimum of 1 metre of insulated flexible duct.
- It is assumed all light fittings are surface mounted. If recessed downlights are used, they shall be non-gimballed type.

Detailed review of the roof / ceiling system requirements shall be carried out by a suitably qualified acoustic consultant once a building design has been developed.

7.3.2.4 Entry Doors

Entry doors to residential dwellings shall generally be constructed from solid core timber doors (nom 35mm thick or 6mm fully frames/glazed elements) with all gaps minimised.

7.3.2.5 Dormers

Any dormers are to be constructed from the same constructions as indicated in Section 7.3.2.3.

8 CONCLUSION

This report presents our assessment of external noise intrusion in accordance with the requirements of VicRoads, the Passenger Rail Infrastructure Noise Policy, EPA 1826.4 Part 1 into the proposed Lot 1 Drew's Paddock residential development located on Heinz Lane, Invermay Park.

In conclusion, refer the following points:

1. The traffic noise level from Western Freeway complies with the VicRoads requirements at the subject development.

2. The noise level emission from the western industrial precinct and the Boral Asphalt currently complies with EPA 1826.4 Part 1 day-time criteria within the subject development.

3. The train noise level from the Ballarat-Maryborough rail corridor complies with the Passenger Rail Infrastructure Noise Policy.

Further in-principle acoustic treatment recommendations for the external fabric construction (glazing, external wall, roof / ceiling) for future dwellings as indicated in Zones A and B within the subject development has been provided. Note that this shall be reviewed by a suitably qualified acoustic consultant during detailed design to ensure compliance with the recommended internal noise level criteria is achieved.

We trust this information is satisfactory. Please contact us should you have any further queries.

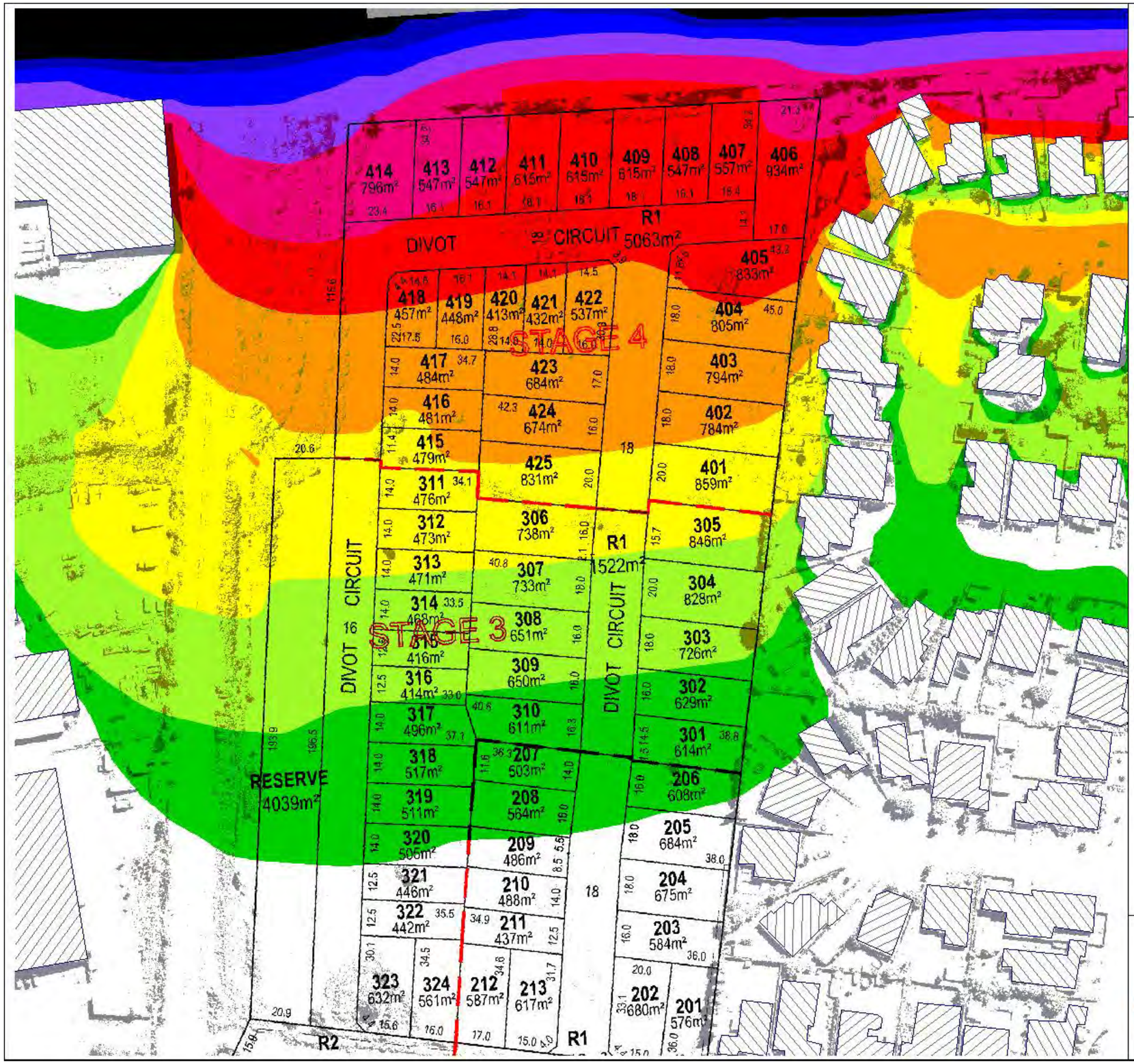
Yours faithfully,

[redacted]

Acoustic Logic Consultancy Pty Ltd

[redacted]

APPENDIX 1 – WESTERN FREEEWAY SOUNDPLAN MODELLING



Heinz Lane
Invermay Park

Future Road Noise Prediction at 1.5m above ground

Prepared by: [redacted]
Date: 7/06/2021

Noise Level
L_{10}
in dB(A)

- = 55
- = 56
- = 57
- = 58
- = 59
- = 60
- = 61
- = 62
- = 63
- = 64
- = 65
- = 66

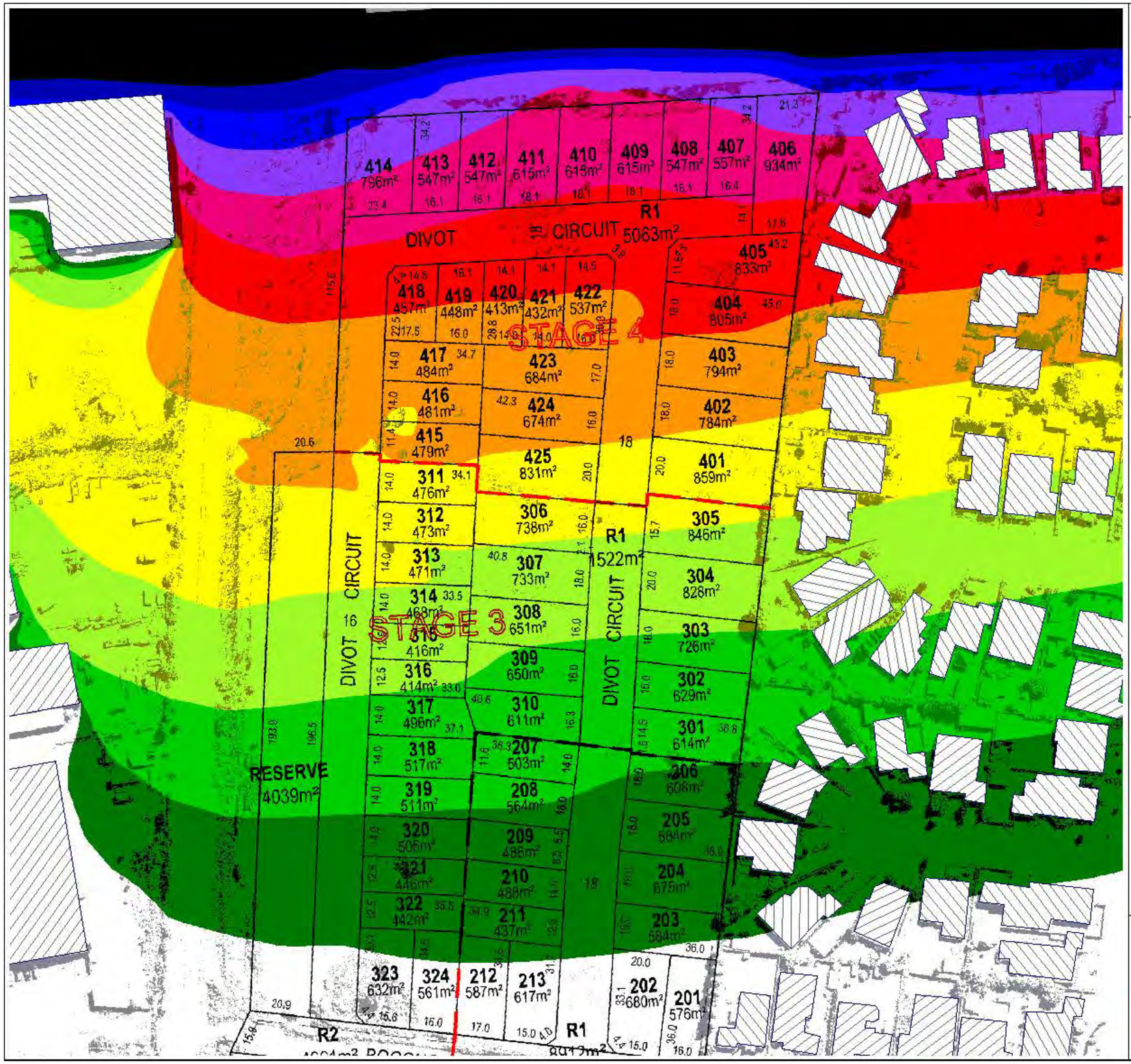
Signs and symbols

- Surface
- Sensitive Receiver
- Commercial Receiver
- Point source
- Ground absorption
- Road axis
- Emission line
- Central reservation

Length scale 1:1851
0 10 20 40 60 80 m

N

ACOUSTIC LOGIC



Heinz Lane
Invermay Park

Future Road Noise Prediction at 4.5m above ground

Prepared by: [redacted]
Date: 7/06/2021

Noise Level
L_{10}
in dB(A)

- = 55
- = 56
- = 57
- = 58
- = 59
- = 60
- = 61
- = 62
- = 63
- = 64
- = 65
- = 66

Signs and symbols

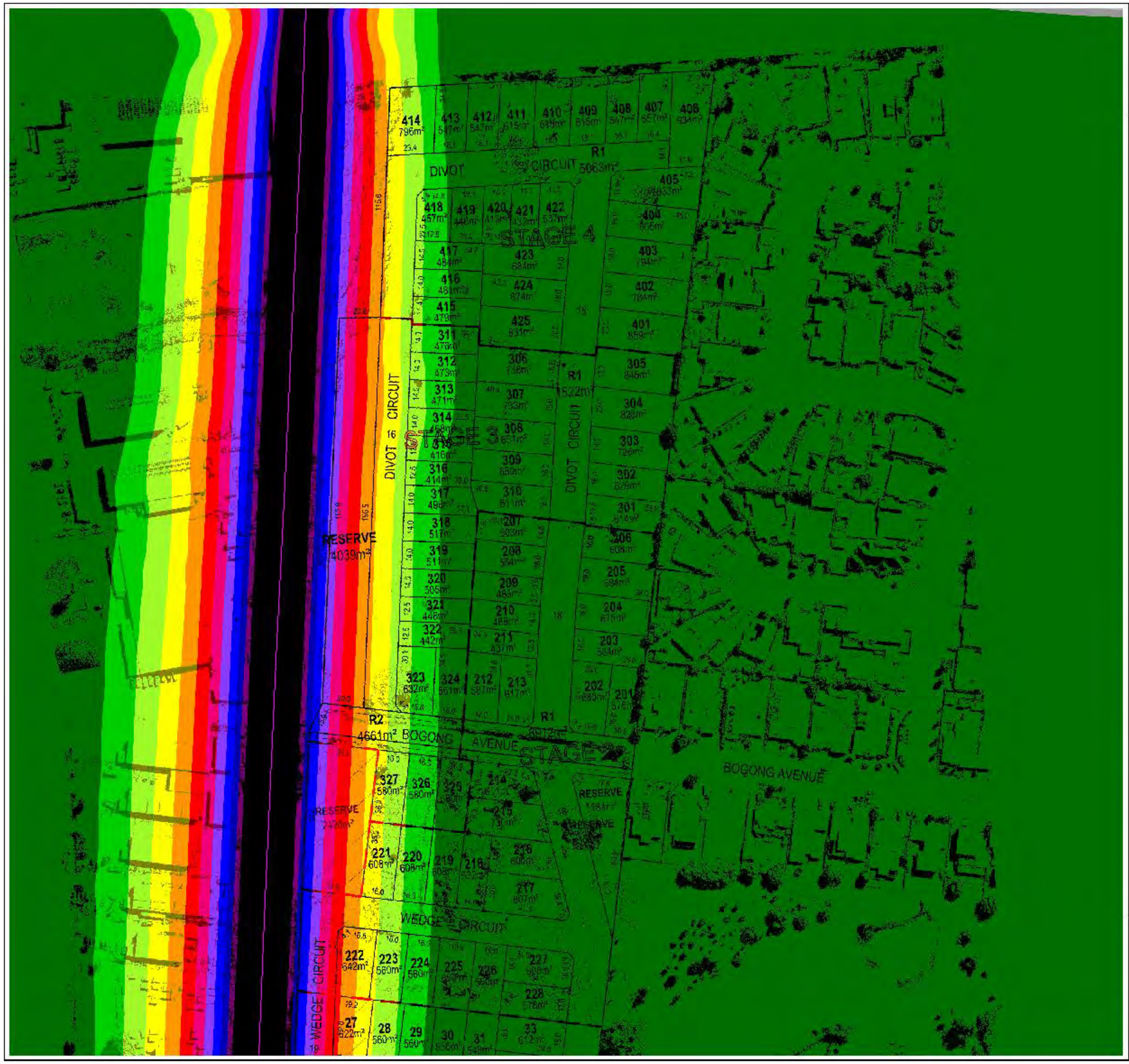
- Surface
- Sensitive Receiver
- Commercial Receiver
- Point source
- Ground absorption
- Road axis
- Emission line
- Central reservation

Length scale 1:1858
0 10 20 40 60 80 m

N

ACOUSTIC LOGIC

APPENDIX 2 – TRAIN NOISE SOUNDPLAN MODELLING



Heinz Lane
Invermay Park

Daytime Rail Noise Prediction at 1.5m above ground

Prepared by: [redacted]
Date: 7/06/2021

Noise Level
$L_{eq,16hr}$
in dB(A)

- <= 50
- <= 51
- <= 52
- <= 53
- <= 54
- <= 55
- <= 56
- <= 57
- <= 58
- <= 59
- <= 60
- > 60

Signs and symbols

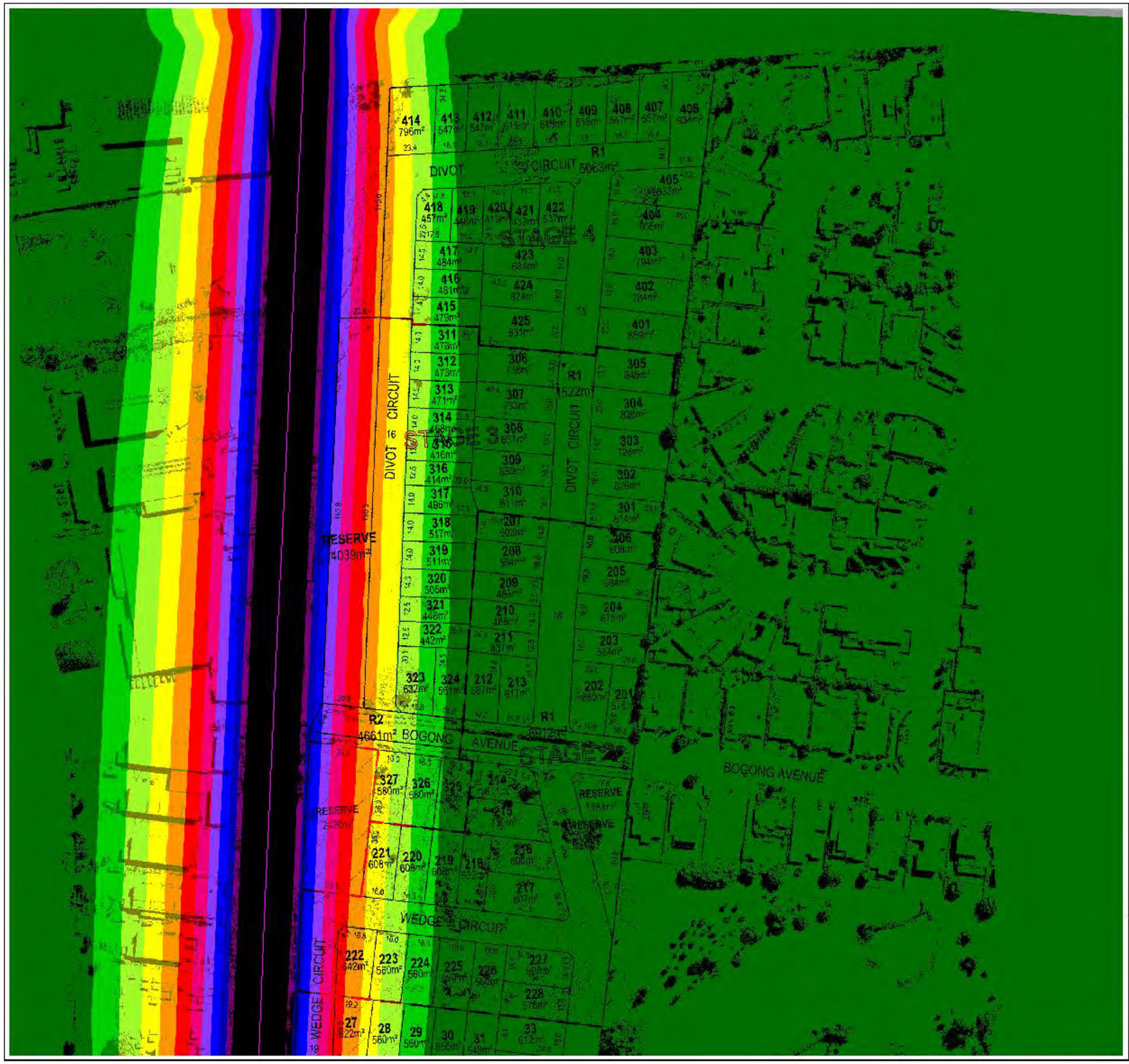
- Surface
- Sensitive Receiver
- Commercial Receiver
- Point source
- Ground absorption
- Road axis
- Emission line
- Central reservation
- Line source

Length scale 1:2692

0 12.5 25 50 75 100 m

N

ACOUSTIC LOGIC



Heinz Lane
Invermay Park

Daytime Rail Noise Prediction at 4.5m above ground

Prepared by: [redacted]
Date: 7/06/2021

Noise Level
$L_{eq,16hr}$
in dB(A)

- <= 50
- <= 51
- <= 52
- <= 53
- <= 54
- <= 55
- <= 56
- <= 57
- <= 58
- <= 59
- <= 60
- > 60

Signs and symbols

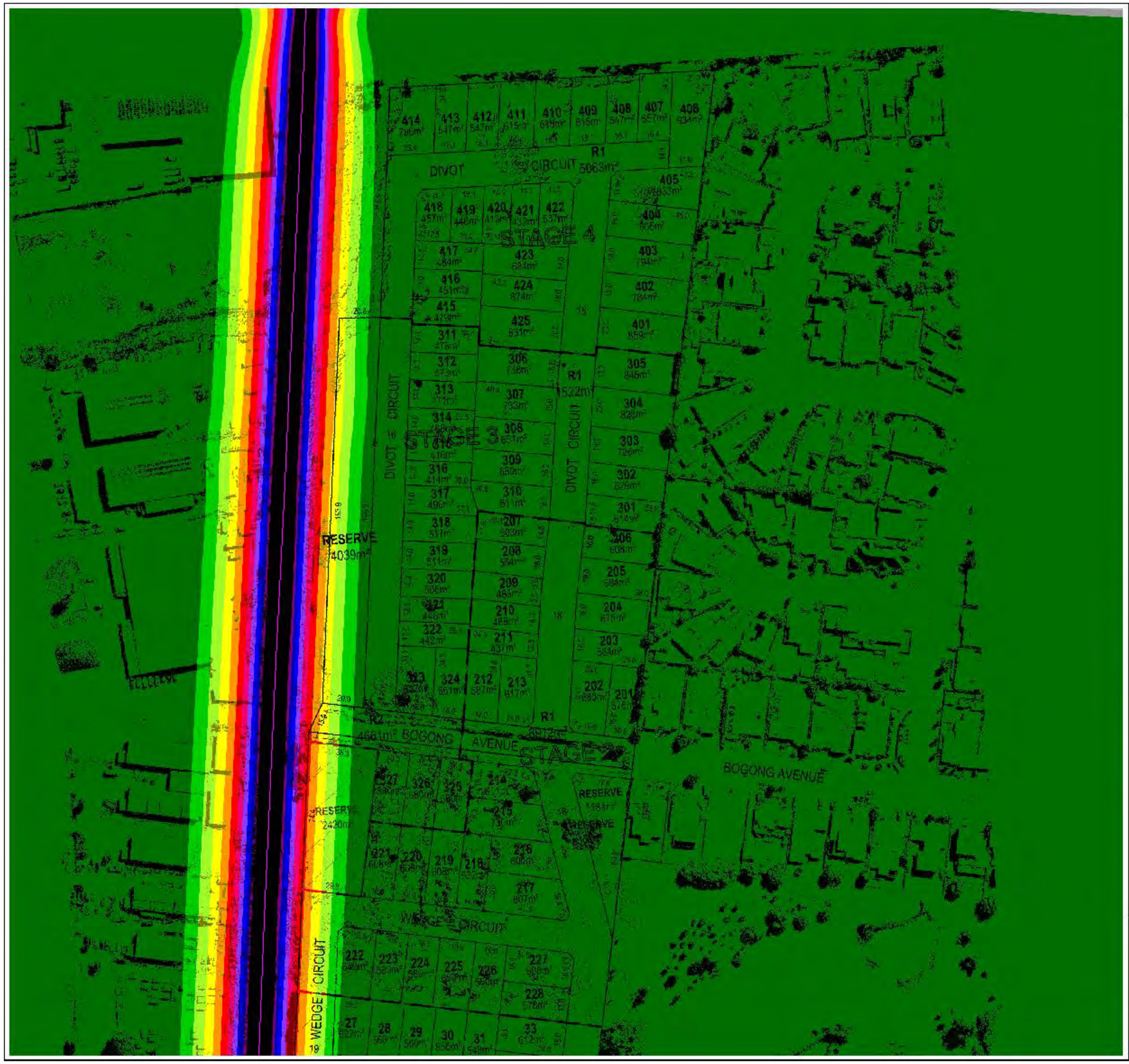
- Surface
- Sensitive Receiver
- Commercial Receiver
- Point source
- Ground absorption
- Road axis
- Emission line
- Central reservation
- Line source

Length scale 1:2692

0 12.5 25 50 75 100 m

N

ACOUSTIC LOGIC



Heinz Lane
Invermay Park

Night Rail Noise Prediction
at 1.5m above ground

Prepared by: [redacted]
Date: 7/06/2021

Noise Level
$L_{eq,8hr}$
in dB(A)

- <= 50
- <= 51
- <= 52
- <= 53
- <= 54
- <= 55
- <= 56
- <= 57
- <= 58
- <= 59
- <= 60
- > 60

Signs and symbols

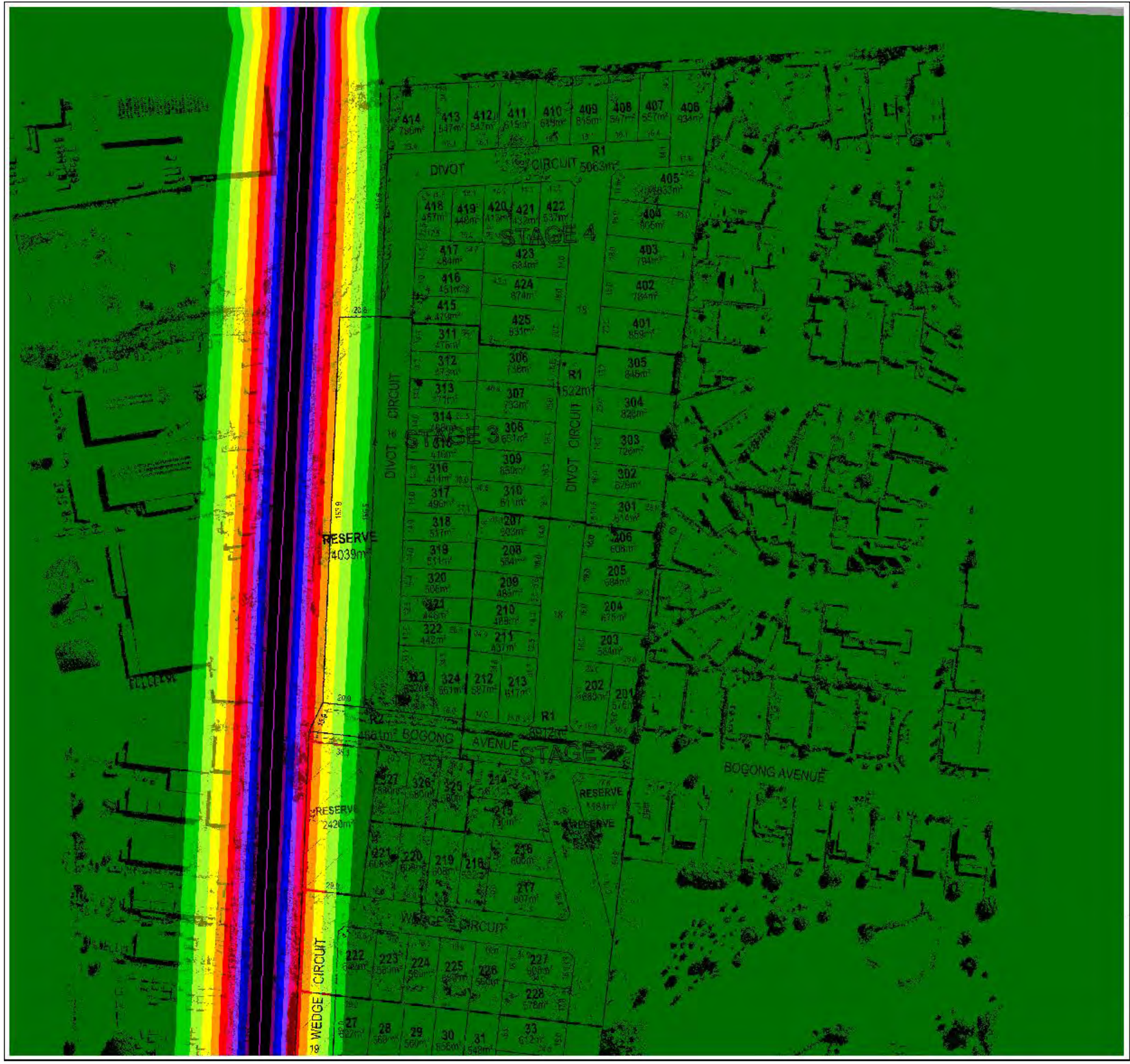
- Surface
- Sensitive Receiver
- Commercial Receiver
- Point source
- Ground absorption
- Road axis
- Emission line
- Central reservation
- Line source

Length scale 1:2692

0 12.5 25 50 75 100 m

N

ACOUSTIC LOGIC



Heinz Lane
Invermay Park

Night Rail Noise Prediction at 4.5m above ground

Prepared by: [redacted]
Date: 7/06/2021

Noise Level
$L_{eq,8hr}$
in dB(A)

- <= 50
- <= 51
- <= 52
- <= 53
- <= 54
- <= 55
- <= 56
- <= 57
- <= 58
- <= 59
- <= 60
- > 60

Signs and symbols

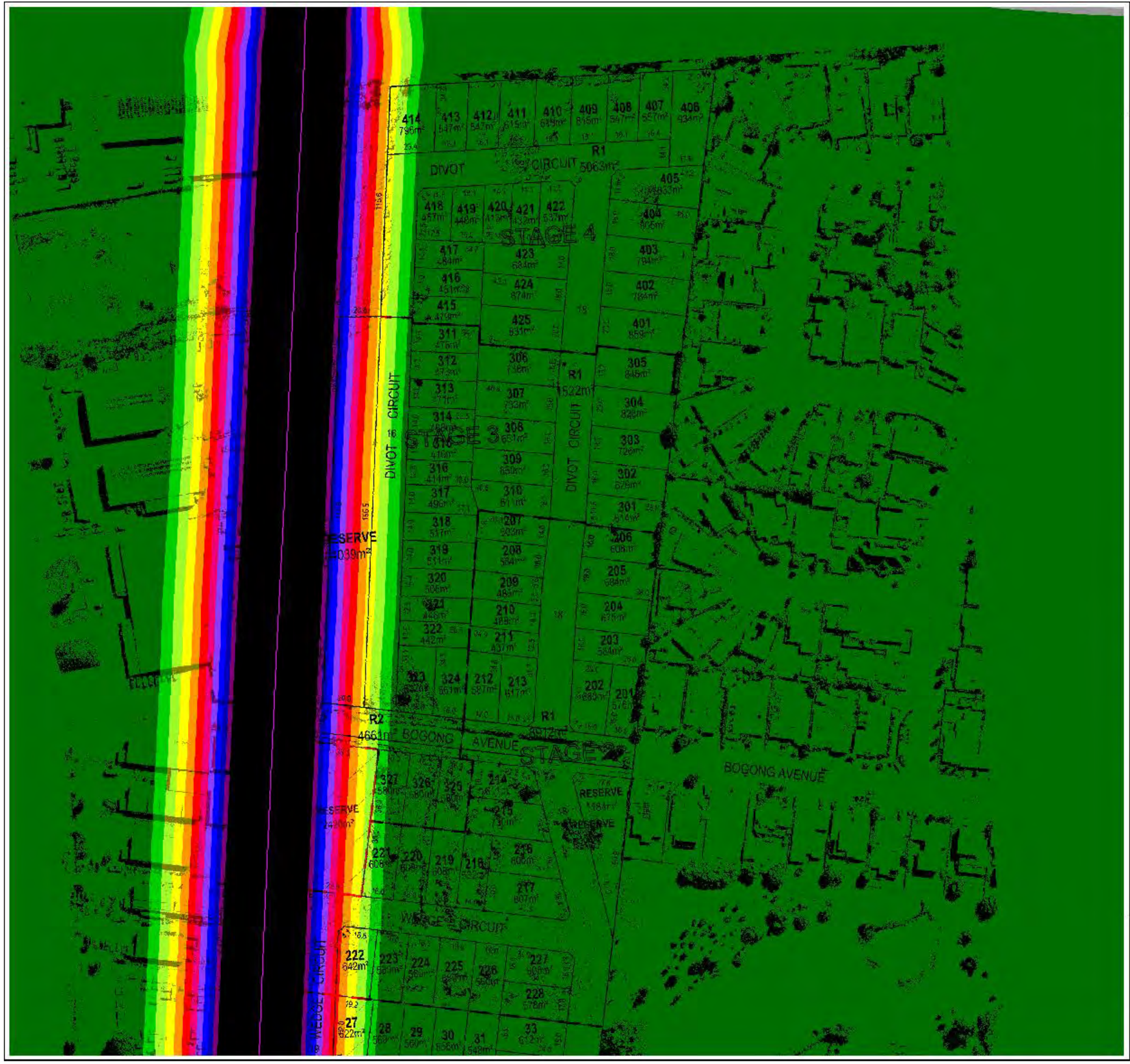
- Surface
- Sensitive Receiver
- Commercial Receiver
- Point source
- Ground absorption
- Road axis
- Emission line
- Central reservation
- Line source

Length scale 1:2692

0 12.5 25 50 75 100 m

N

ACOUSTIC LOGIC



Heinz Lane
Invermay Park

Rail Noise Prediction
at 1.5m above ground

Prepared by: [redacted]
Date: 7/09/2020

Noise Level
L_{max}
in dB(A)

- <= 80
- <= 81
- <= 82
- <= 83
- <= 84
- <= 85
- <= 86
- <= 87
- <= 88
- <= 89
- <= 90
- > 90

Signs and symbols

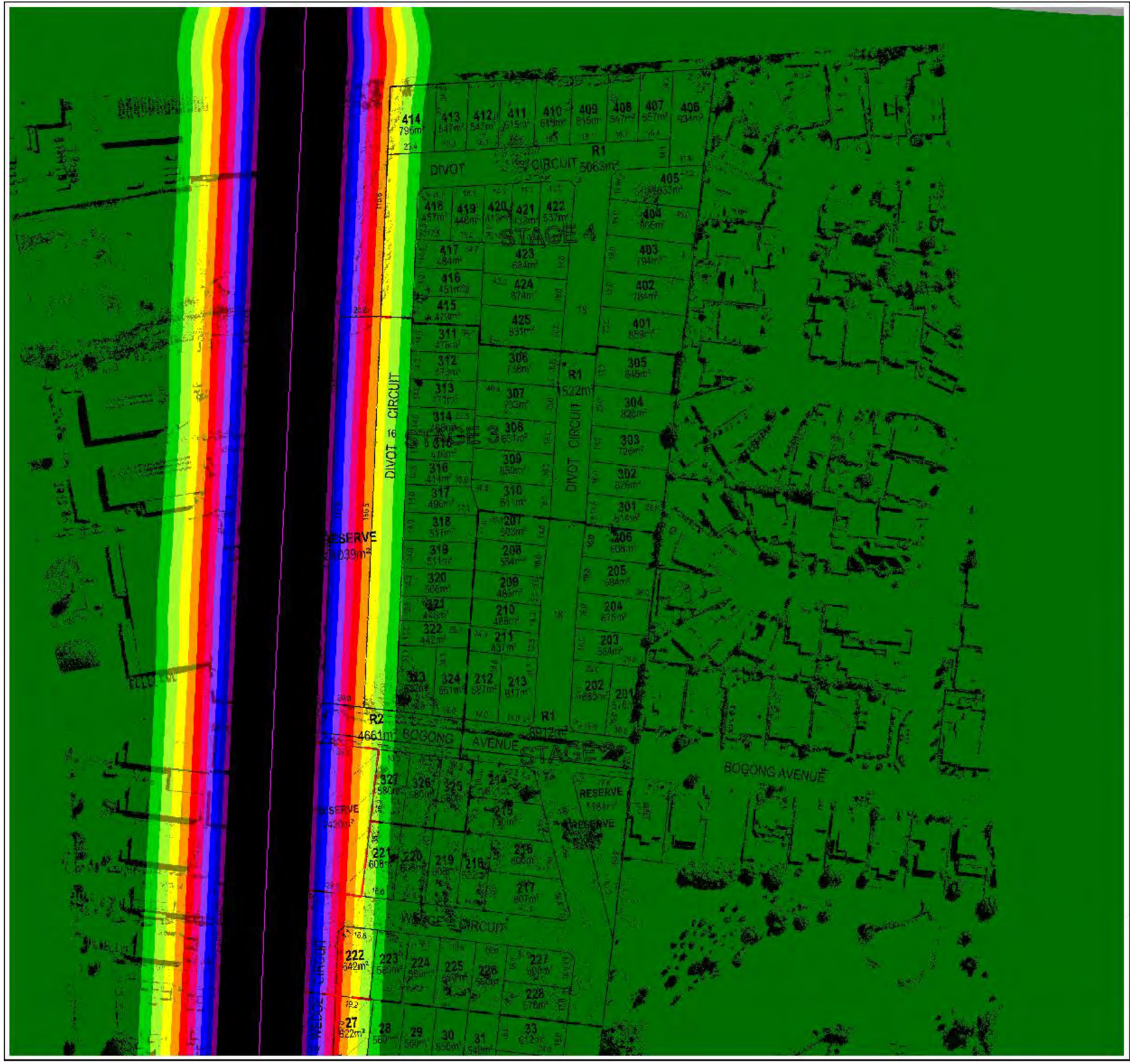
- Surface
- Sensitive Receiver
- Commercial Receiver
- Point source
- Ground absorption
- Road axis
- Emission line
- Central reservation
- Line source

Length scale 1:2692

0 12.5 25 50 75 100 m

N

ACOUSTIC LOGIC



Heinz Lane
Invermay Park

Rail Noise Prediction
at 4.5m above ground

Prepared by: [redacted]
Date: 7/09/2020

Noise Level
L_{max}
in dB(A)

- <= 80
- <= 81
- <= 82
- <= 83
- <= 84
- <= 85
- <= 86
- <= 87
- <= 88
- <= 89
- <= 90
- > 90

Signs and symbols

- Surface
- Sensitive Receiver
- Commercial Receiver
- Point source
- Ground absorption
- Road axis
- Emission line
- Central reservation
- Line source

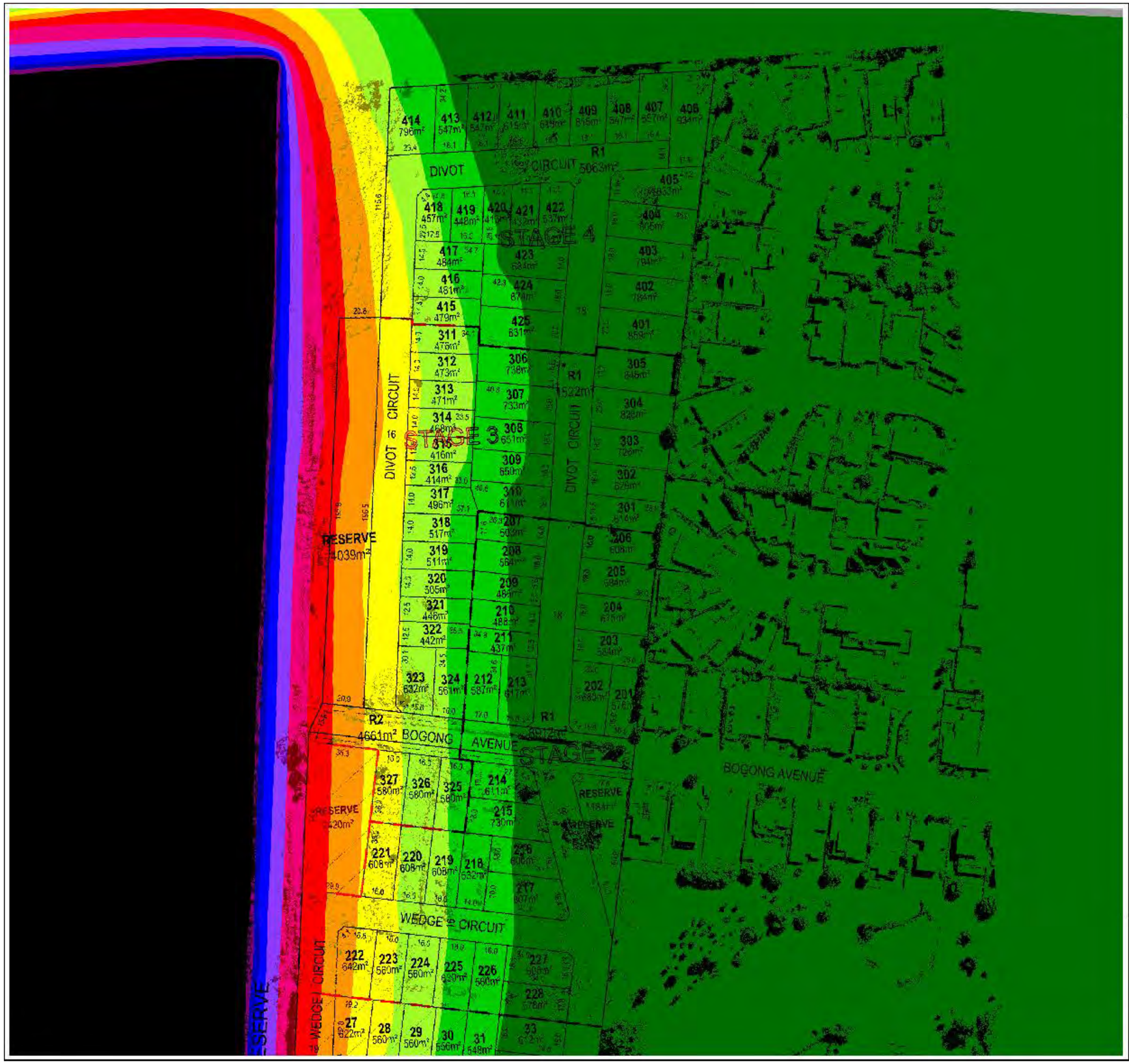
Length scale 1:2692

0 12.5 25 50 75 100 m

N

ACOUSTIC LOGIC

APPENDIX 3 – WESTERN INDUSTIAL PRECINCT SOUNDPLAN MODELLING



Heinz Lane
Invermay Park

Western Industrial Precinct
Noise Prediction at 1.5m above ground

Prepared by: [redacted]
Date: 7/06/2021

Noise Level
L_{eq}
in dB(A)

- <= 50
- <= 51
- <= 52
- <= 53
- <= 54
- <= 55
- <= 56
- <= 57
- <= 58
- <= 59
- <= 60
- > 60

Signs and symbols

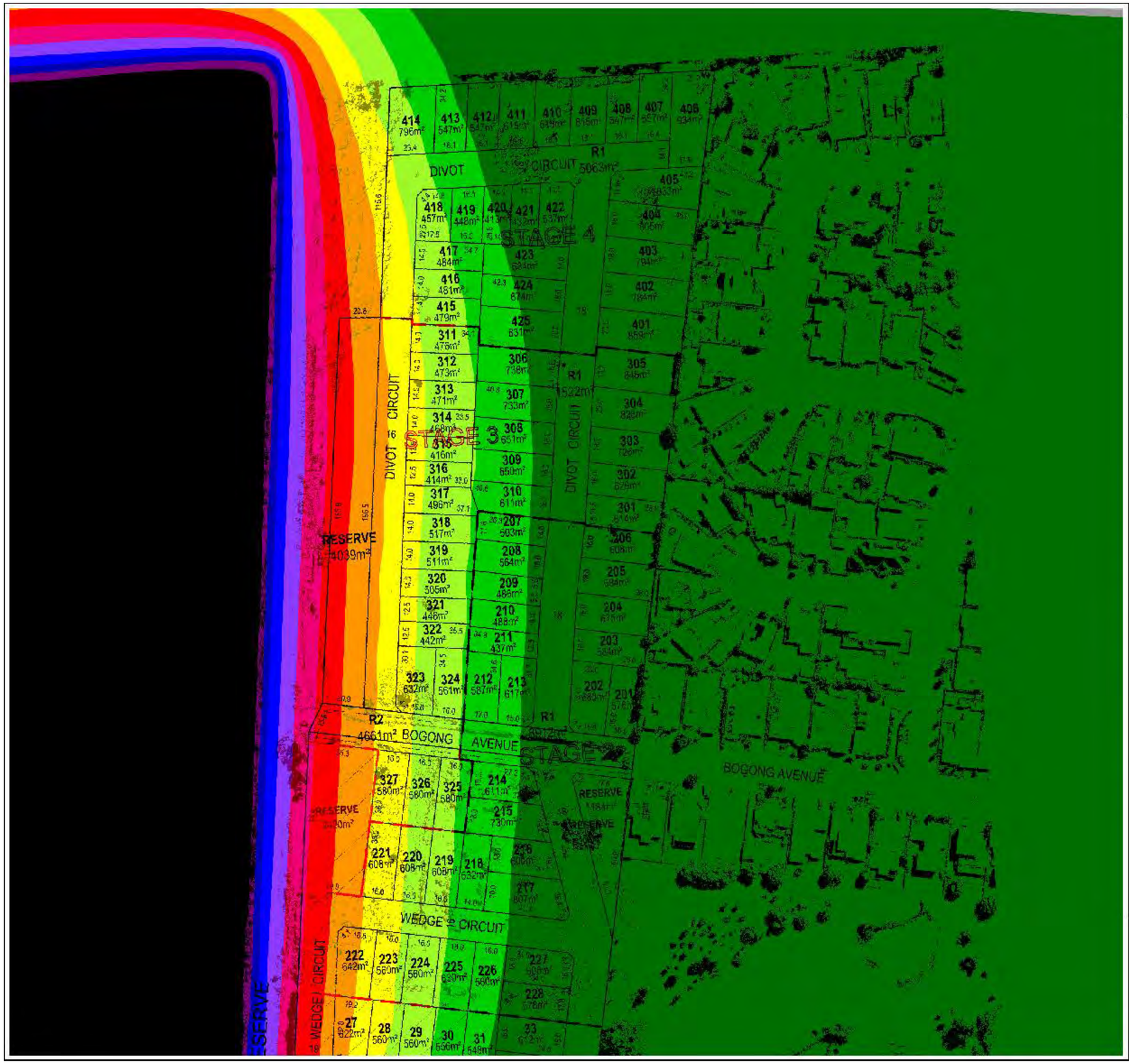
- Surface
- Sensitive Receiver
- Commercial Receiver
- Point source
- Ground absorption
- Road axis
- Emission line
- Central reservation
- Line source
- Area source

Length scale 1:2692

0 12.5 25 50 75 100 m

N

ACOUSTIC LOGIC



Heinz Lane
Invermay Park

Western Industrial Precinct
Noise Prediction at 4.5m above ground

Prepared by: [redacted]
Date: 7/06/2021

Noise Level
L_{eq}
in dB(A)

- <= 50
- <= 51
- <= 52
- <= 53
- <= 54
- <= 55
- <= 56
- <= 57
- <= 58
- <= 59
- <= 60
- > 60

Signs and symbols

- Surface
- Sensitive Receiver
- Commercial Receiver
- Point source
- Ground absorption
- Road axis
- Emission line
- Central reservation
- Line source
- Area source

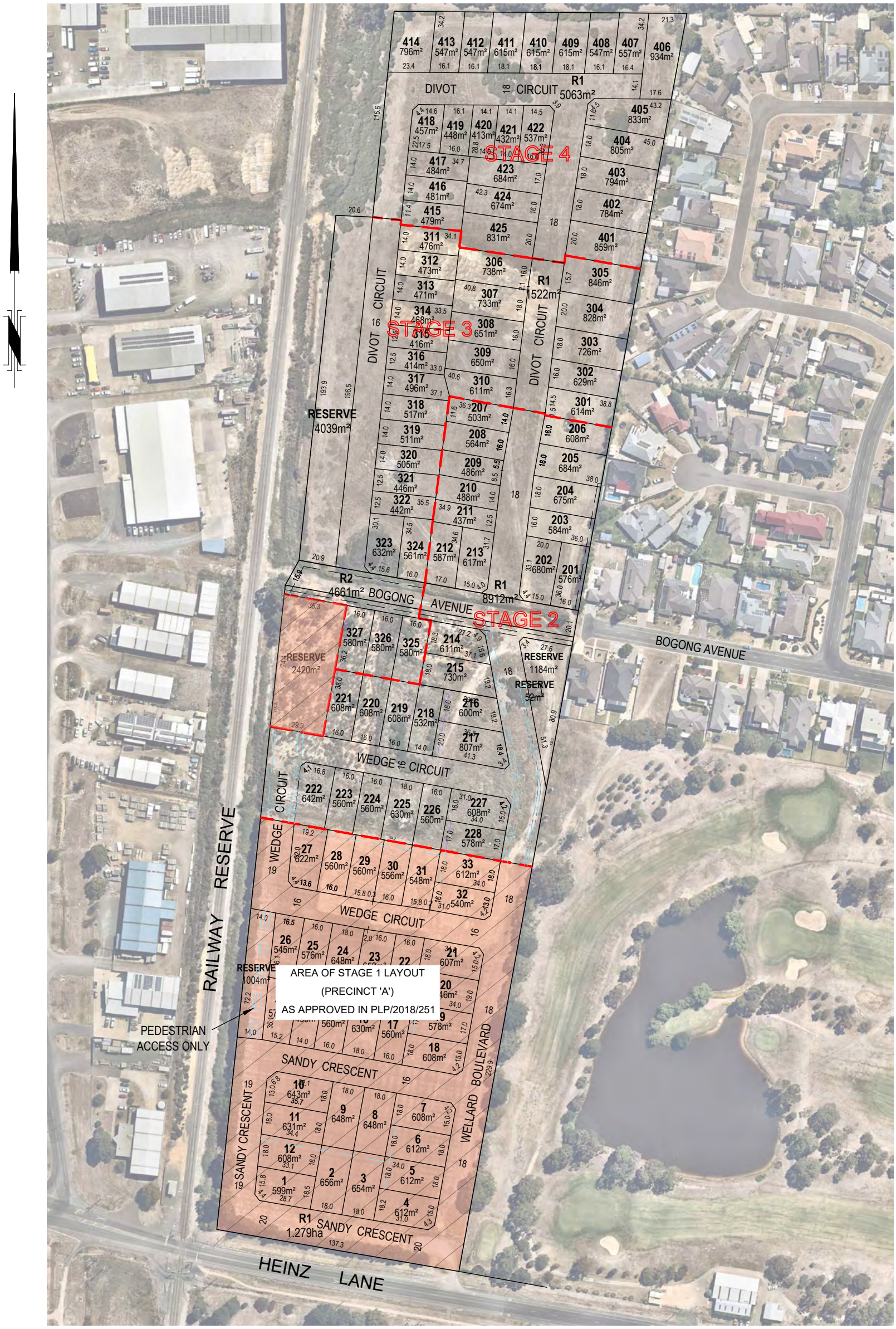
Length scale 1:2692

0 12.5 25 50 75 100 m

N

ACOUSTIC LOGIC

APPENDIX 4 – REFERENCED DRAWINGS



Cardno TGM
ABN 11 125 568 461
1315 Sturt Street, Ballarat, VIC Australia (PO Box 563W, Ballarat West) 3350
Phone +61 3 5330 8888 Fax +61 3 5333 3815
Email: victoria@cardno.com.au Web: www.cardno.com

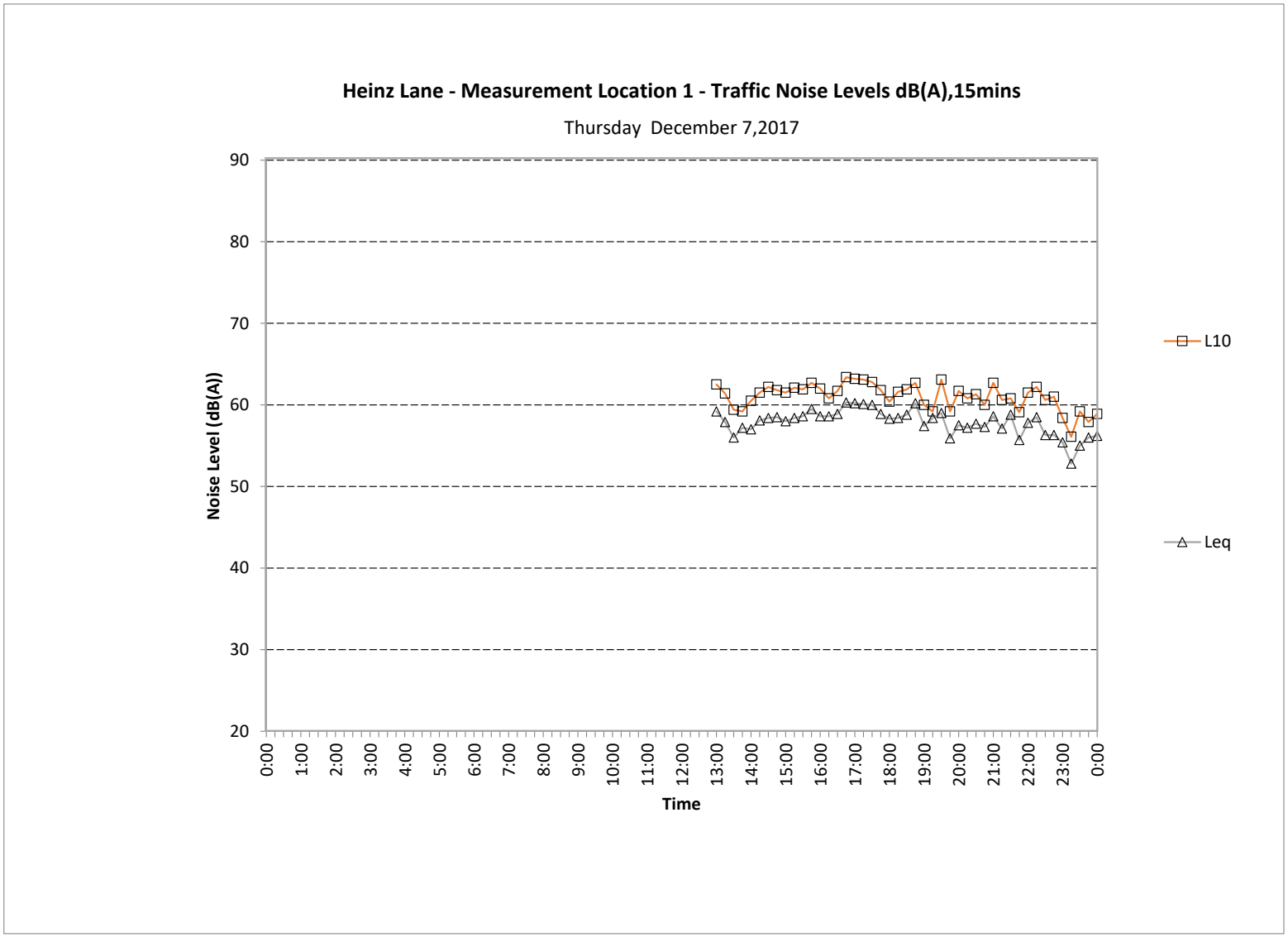
Rev.	Date	Amendments
14	18/12/2020	REV. STAGE BDY
10-13	20/11/2020	REV. LOT DIMENSIONS/LAYOUT
09	18/05/2020	REV. LOT DIMENSIONS/LAYOUT
08	18/05/2020	REV. LOT DIMENSIONS/LAYOUT
07	12/03/2019	REV. LOT DIMENSIONS/LAYOUT
06	13/08/2019	PROP. ROAD NAMES ADDED
05	24/07/2019	REMOVE NOTATION

Drawn	PF	
Checked	ASH	
Scale	1:2000	
Sheet Size	A3	
File Ref.	17547-08-PP01(2-4)-14	
Sheet No.	1 of 1	

Client: VILLAWOOD PROPERTIES
Municipality: CITY OF BALLARAT
20 0 20 40 60 80 100
Scale in Metres

PLAN OF PROPOSED SUBDIVISION LAYOUT PRECINCT 'B' HEINZ LANE INVERMAY PARK

APPENDIX 5 - NOISE MONITORING DATA


Heinz Lane - Measurement Location 1 - Traffic Noise Levels dB(A),15mins
Thursday December 7,2017
Noise Level (dB(A))
90
80
70
60
50
40
30
20
0:00
1:00
2:00
3:00
4:00
5:00
6:00
7:00
8:00
9:00
10:00
11:00
12:00
13:00
14:00
15:00
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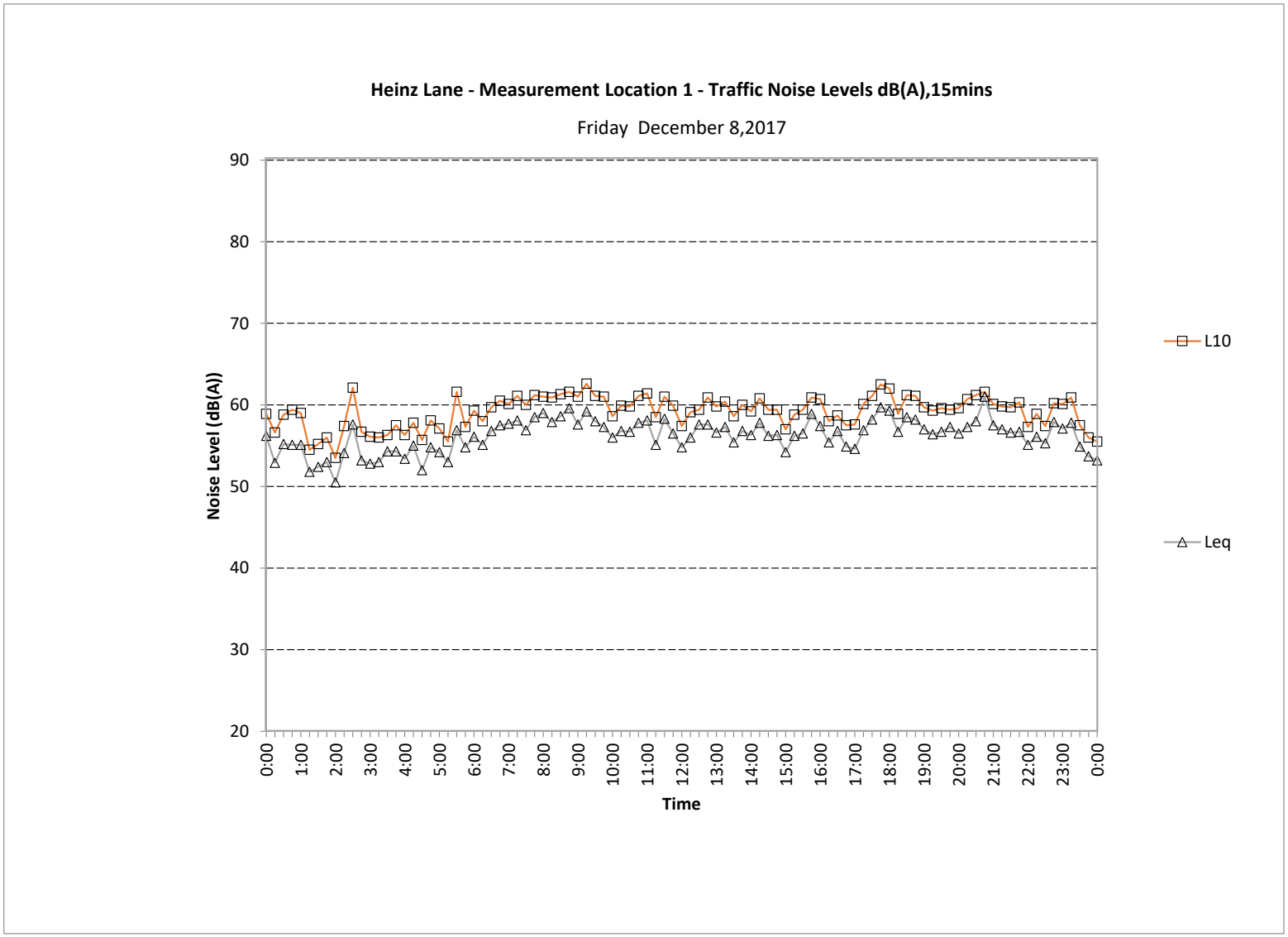
18:00
19:00
20:00
21:00
22:00
23:00
0:00
Time
L10
Leq


Heinz Lane - Measurement Location 1 - Traffic Noise Levels dB(A),15mins
Friday December 8,2017
Noise Level (dB(A))
90
80
70
60
50
40
30
20
0:00
1:00
2:00
3:00
4:00
5:00
6:00
7:00
8:00
9:00
10:00
11:00
12:00
13:00
14:00
15:00
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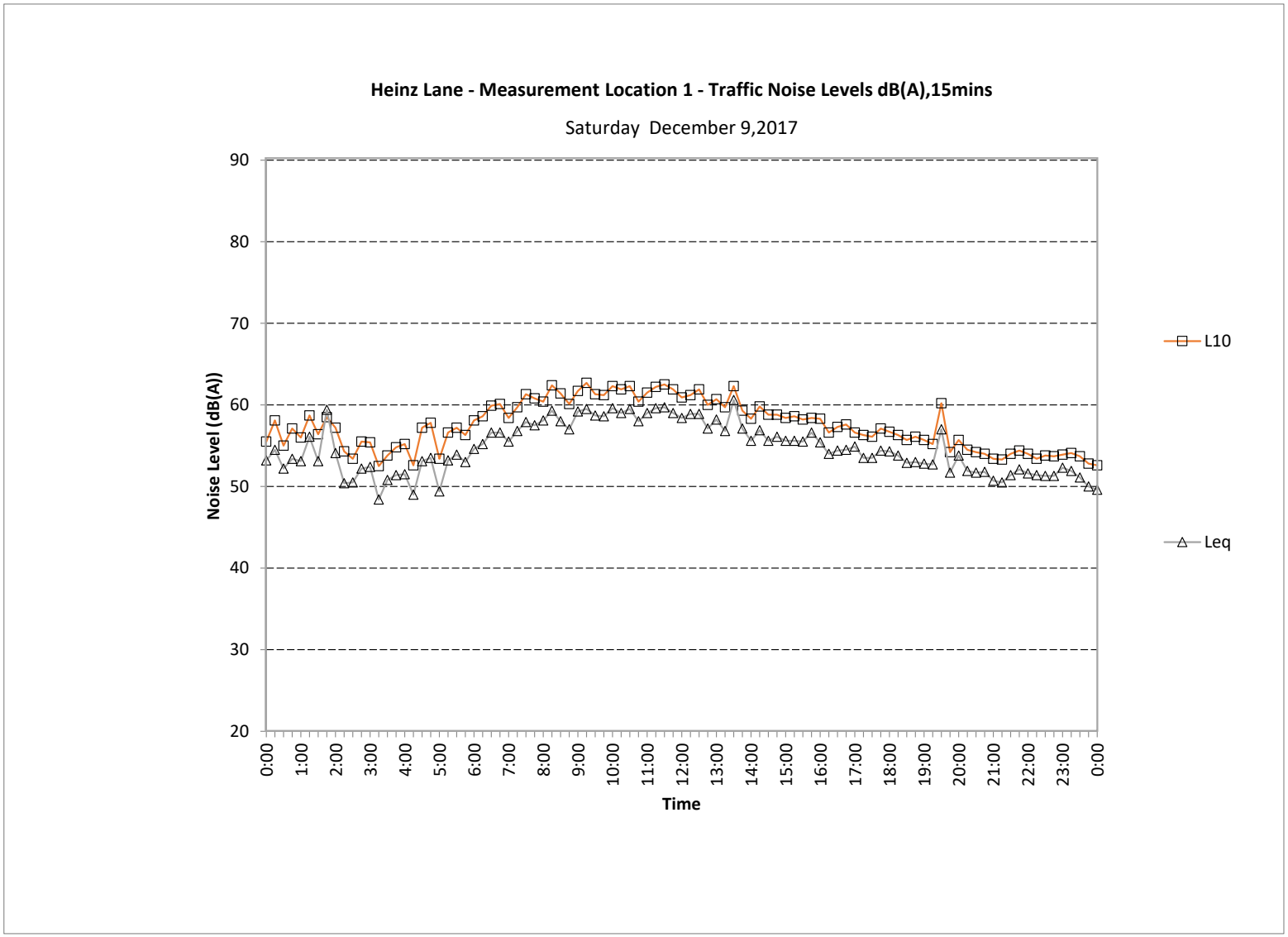
18:00
19:00
20:00
21:00
22:00
23:00
0:00
Time
L10
Leq


Heinz Lane - Measurement Location 1 - Traffic Noise Levels dB(A),15mins
Saturday December 9,2017
Noise Level (dB(A))
90
80
70
60
50
40
30
20
0:00
1:00
2:00
3:00
4:00
5:00
6:00
7:00
8:00
9:00
10:00
11:00
12:00
13:00
14:00
15:00
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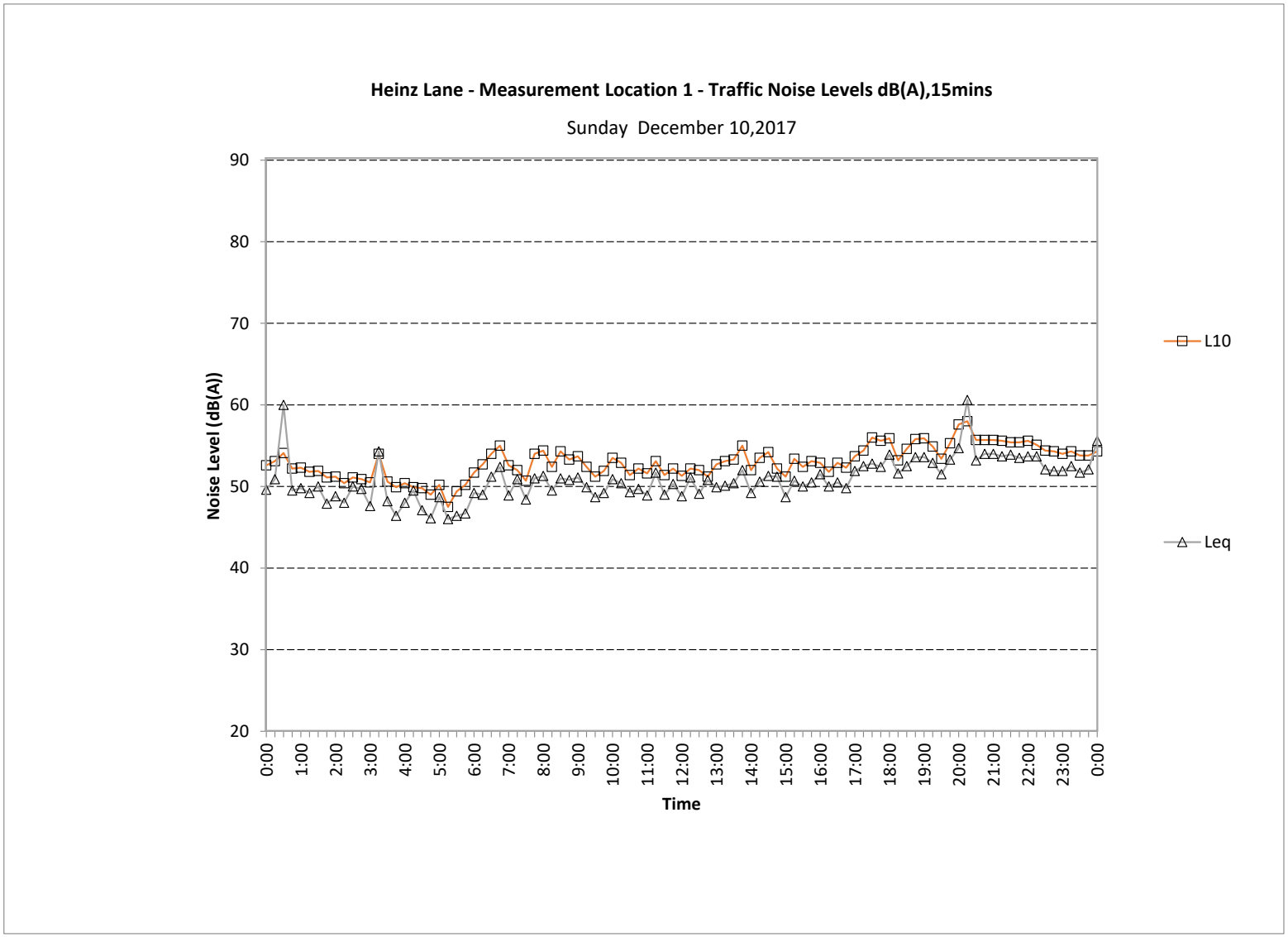
21:00
22:00
23:00
0:00
Time
L10
Leq


Heinz Lane - Measurement Location 1 - Traffic Noise Levels dB(A),15mins
Sunday December 10,2017
Noise Level (dB(A))
90
80
70
60
50
40
30
20
0:00
1:00
2:00
3:00
4:00
5:00
6:00
7:00
8:00
9:00
10:00
11:00
12:00
13:00
14:00
15:00
16:00
17:00
18:00
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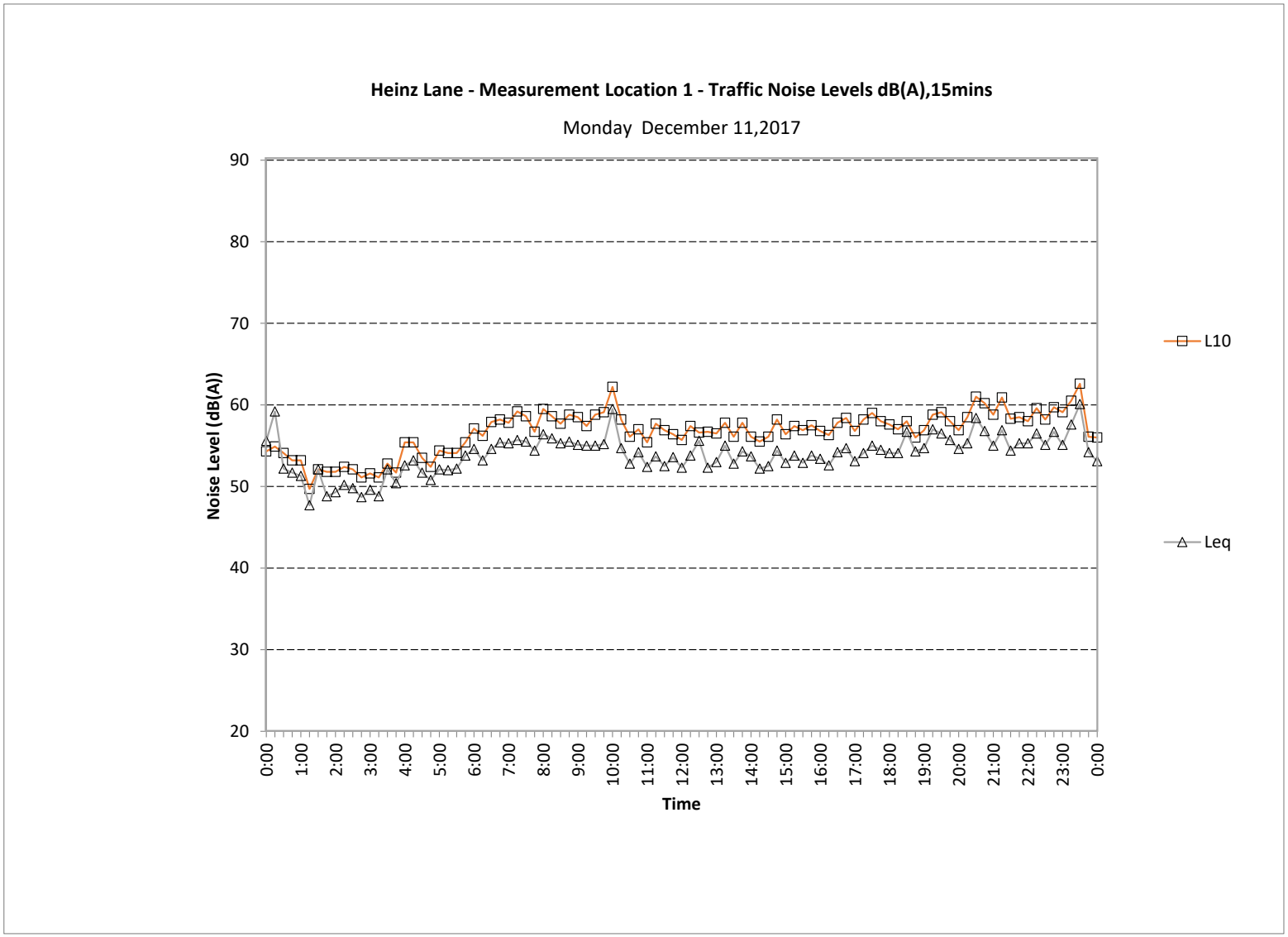
20:00
21:00
22:00
23:00
0:00
Time
L10
Leq


Heinz Lane - Measurement Location 1 - Traffic Noise Levels dB(A),15mins
Monday December 11,2017
Noise Level (dB(A))
90
80
70
60
50
40
30
20
0:00
1:00
2:00
3:00
4:00
5:00
6:00
7:00
8:00
9:00
10:00
11:00
12:00
13:00
14:00
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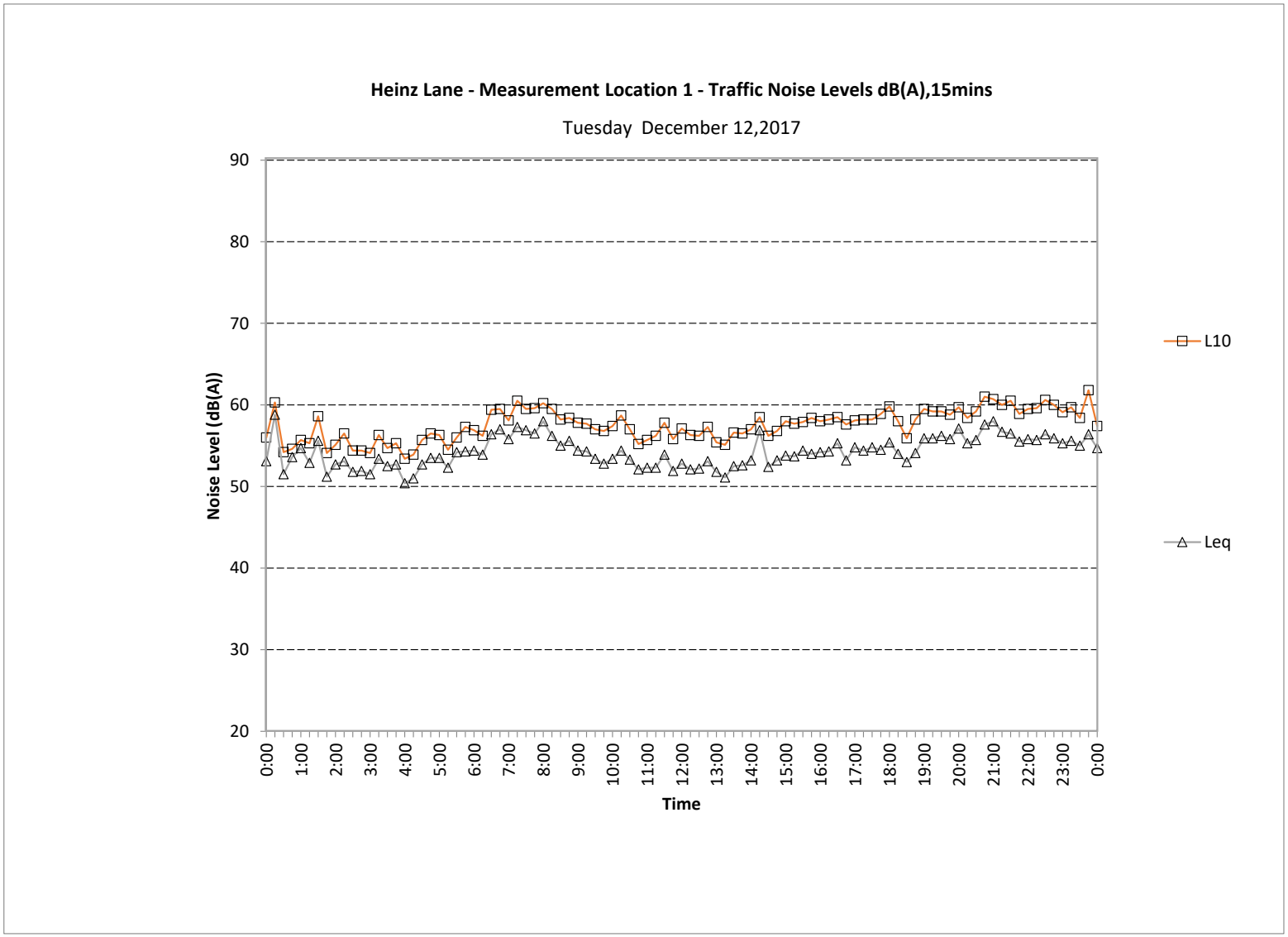
20:00
21:00
22:00
23:00
0:00
Time
L10
Leq


Heinz Lane - Measurement Location 1 - Traffic Noise Levels dB(A),15mins
Tuesday December 12,2017
Noise Level (dB(A))
90
80
70
60
50
40
30
20
0:00
1:00
2:00
3:00
4:00
5:00
6:00
7:00
8:00
9:00
10:00
11:00
12:00
13:00
14:00
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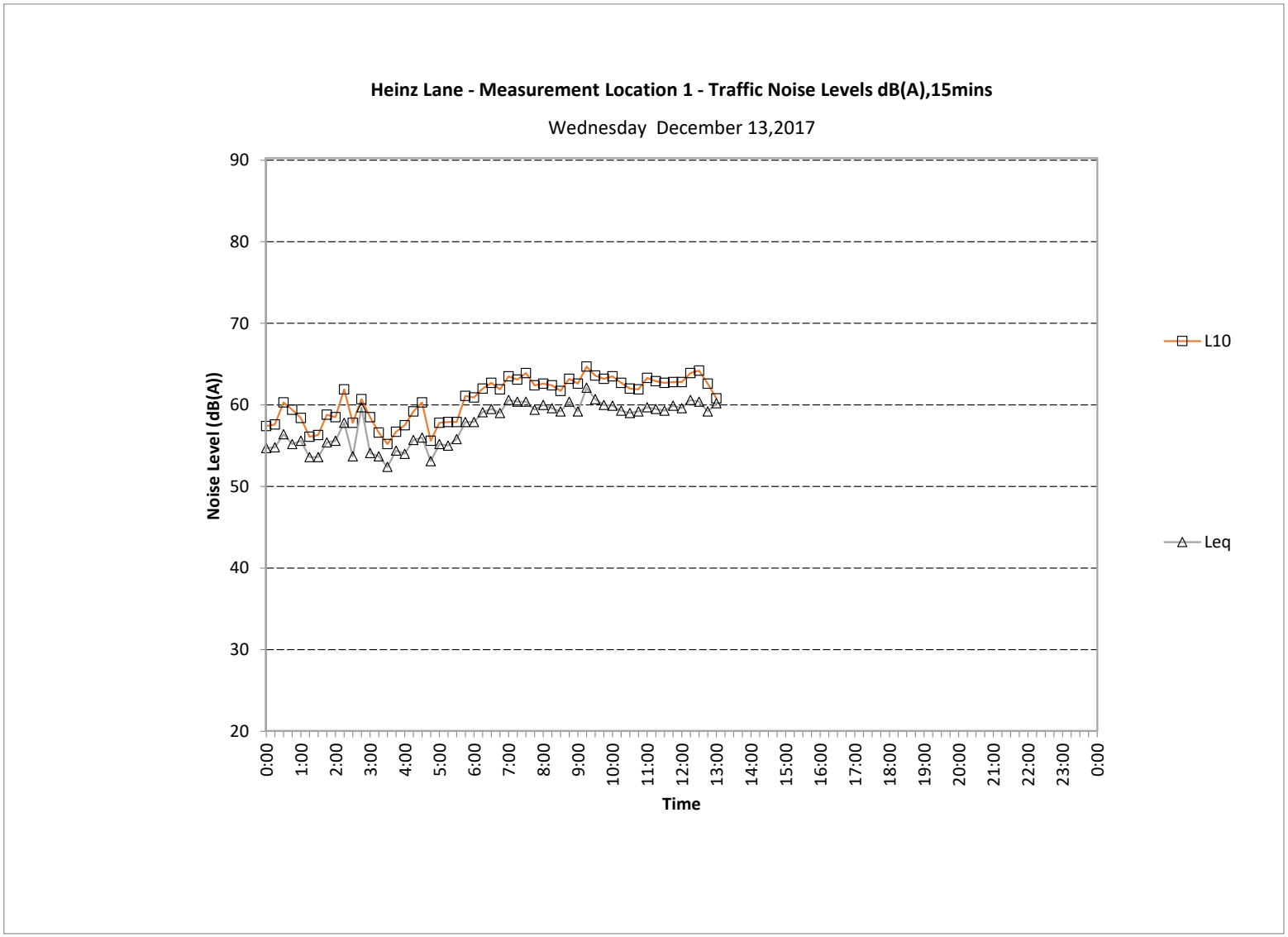
21:00
22:00
23:00
0:00
Time
L10
Leq


Heinz Lane - Measurement Location 1 - Traffic Noise Levels dB(A),15mins
Wednesday December 13,2017
Noise Level (dB(A))
90
80
70
60
50
40
30
20
0:00
1:00
2:00
3:00
4:00
5:00
6:00
7:00
8:00
9:00
10:00
11:00
12:00
13:00
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16:00
17:00
18:00
19:00
20:00
21:00
22:00
23:00
0:00
Time
L10
Leq

MARSHALL DAY Acoustics

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www.marshallday.com

18 January 2022

City of Ballarat
PO Box 655
Ballarat VIC 3353

Attention: [redacted]

Dear [redacted]

REVIEW OF ADDITIONAL INFORMATION PROVIDED BY ALC

A town planning application has been submitted to the City of Ballarat (Council) for a residential subdivision at Lot 1 Heinz Lane, Invermay Park, located in Ballarat. Acoustic Logic Consulting (ALC) have prepared an acoustic report that Marshall Day Acoustics Pty Ltd (MDA) have undertaken a peer review that is documented in letter reference: *Lt 002 20200608 Peer Review – Lot 1 Heinz Lane Invermay* (Lt 002).

Council has requested that MDA undertake a further follow up review, of ALCs response to the peer of their assessment. The ALC response is documented in their letter: *202111112BAWA_R4_Response_to_MDA_Comments (ALC Response)*. A reference extract of the ALC response letter is included in Appendix A.

Reference throughout this letter to the Noise Protocol refers to EPA Publication *1826 Noise limit and assessment protocol for the control of noise from commercial, industrial and trade premises and entertainment venues.*

MDA Summary comments

Document reviewed: 202111112BAWA_R4_Response_to_MDA_Comments

Our comments to the ALC Response are provided in Table 1.

Table 1: MDA Response comments

MDA Ref No.	MDA Comment
1	While it is acknowledged that ALC have taken further steps to review the current operation of the industrial area, as previously raised Council have confirmed that the area, at present, has no limit to the period of operation. It is recommended that AL consider the impact of the industrial area under a scenario where operations occur during the evening and night. If the industrial area operates during these periods, now or in the future, this may result in the need to stop or curtail their operations.
2	Given ALC have not included an assessment of noise from the Boral Asphalt plant, there remains a risk that noise from this site has not been properly accounted for. However, the risk appears to be low given ALC's reporting that noise from the Boral site was inaudible during operation of the plant during the day, evening and night periods.
3	Noted

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MDA Ref No.	MDA Comment
4	Given the supplementary noise measurements are higher-than-neutral background conditions, what noise sources are contributing to the ambient noise level in this location? Have the supplementary measurements been reviewed to consider the weather conditions i.e. wind speed, wind direction, precipitation etc as per the Noise Protocol methodology?
5	Noted
6	It is acknowledged that the modelling of traffic noise will consider favourable wind conditions. However, as per Item 4, we request that ALC outline the weather conditions taken into account for Location 7 (i.e. the industrial noise monitoring location) and also the supplementary noise monitor location to measure noise from the Boral facility in the north-west of the site. It would be expected that this is discussed in the AL report, and the impact on the assessment detailed.
7	Noted.
8	Noted. However, how was the supplementary monitoring provided in Table 3 used in the assessment, if at all?
9	See comment No.4
10	Noted. This was missed in the review as note was on the page over, further there was confusion with the cross reference provided in Table 6 Note 1 that also refers to Table 7 On the basis of the note provided to Table 7, it is understood that freight trains passes did/do occur during the night period. Have ALC any further comments to provide regarding potential impact on dwellings and/or sleep disturbance?
11	Noted.
12	Noted. Confirm how adjustments for noise character have been considered as per the Noise Protocol
13	It is acknowledged that ALC have undertaken further assessment of activity from the industrial are to the west of the development site. We note that the assessment considers a mix of plant and equipment that was operation at the site during the site investigation, however we provide the following comments 1. Have all noise sources been documented? Particularly regarding the Hasco Foundary 2. ALC to confirm that the requirements of the Noise Protocol have been followed when assessing the effective noise level. This includes tonality adjustment, impulse adjustment and intermittency adjustment 3. Have vehicle deliveries and collections been taken into account in the assessment?
14	As per note No. 12 and 13 confirm how adjustments for noise character, and sources such as deliveries have been considered as per the Noise Protocol
15	Noted.
16	Note the response to No.2 The response lacks consideration of weather conditions during the noise monitoring, specifically the wind direction and whether downwind conditions were assessed.

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MDA Ref No.	MDA Comment
17	While we acknowledge ALC's experience of vibration, they will be aware that ground and sub-ground condition can vary from site to site. If ALC and their client are comfortable that there is no need for further vibration assessment associated with freight trains, this is acknowledged. Council to provide comment on the use and validity of including as part of a Section 32 agreement.
18	While we acknowledge ALC approach and the adoption of a criteria from the Regional Rail Link project, however, using 65 L_{Amax} could be considered, as non-conservative approach for the development.
19	We have undertaken a further calculation of the areas of contribution for the assessment, which result in less than 1 dB difference in the calculations. We are therefore in general agreement with ALC.
20	ALC comments are noted, and it is therefore assumed, based on the response, that all ventilation for these nominated properties will be provided by mechanical purposes.
21	Noted
22	Noted. Reviewed in conjunction with the noise contour maps Figure 2 and Figure 3 (page 4 – *ALC Response*)
23	Confirm the metric of the traffic data i.e. is it Annual Average Weekday Traffic (AAWT) or does it represent 18-hour conditions?
24	Noted
25	If a similar noise level has been measures at Position 7 and 8 then it would be a reasonable assumption to use the same L_{Amax} level for the length of track. ALC to confirm that the model been calibrated to confirm that the L_{Amax} level is as per the level measured at Position 7 and 8.
26	Noted This was noted given that the trains will likely slow down on approach to the level crossing on Heinz Lane, and then speed up moving away from the level-crossing. If ALC observations are that train speed remains constant, and there is no variation in the track (i.e. points), then we have no further comments.
27	We accept that the investigation threshold levels referenced for this project are the same as those on other sites, though there is no specific overlay for this site outlining applicable criteria. We accept that the external rail levels are under (or at) the investigation thresholds outlined in the PRINP. We assume that the acoustic treatment outlined in Section 7.3 would allow internal short-term maximum noise levels associated with train movements at night to achieve the sleep disturbance criteria.
28	See No. 12 and 14 Council to provide comment on the use and validity of including as part of Section 32.
29	See No 2, 6 and 15

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Further to the items identifies and comments provided, there still remains no reference by ALC to:

- the Environmental Reference Standard (under section 93 of the Environmental Protection Act 2017) - ERS. Should the ERS be found to be relevant to this assessment, then commentary should be provided.
- The General Environmental Duty (GED) is outlined in Part 3.2 of the Environmental Protection Act 2017 (the Act) which came into effect 1 July 2021.

It may be beneficial that we have a meeting with the Villawood, ALC and council, this may assist all parties with any misunderstanding/interpretations

If you have any comments or questions, then please do not hesitate to call.

Yours faithfully

MARSHALL DAY ACOUSTICS PTY LTD

[redacted]

[redacted]

Associate

MARSHALL DAY Acoustics

APPENDIX A ACOUSTIC LOGIC (ALC) LETTER: 202111112BAWA_R4_RESPONSE_TO_MDA_COMMENTS

ACOUSTIC LOGIC

MATTHEW PALAVIDIS
VICTOR FATTORETTO
MATTHEW SHIELDS

20180001.3/1211A/R4/BAW

13/10/2021

Villawood MGC Pty Ltd
PO Box 1104
BENDIGO VIC 3551

Attn: [redacted]

330 Heinz Lane, Invermay Park - Response to MDA Comments

1 INTRODUCTION

This letter details our response with respect to the peer review by Marshall Day Acoustics dated 5 October 2021 with reference "Lt 0002 20200608 Peer Review – Lot 1 Heinz Lane Invermay.docx" (MDA Review).

To further confirm existing conditions and noise emissions, AL has undertaken additional inspection of the industrial precinct located to the west of the subject site and the Boral facility. Additional noise monitoring was also undertaken at both the subject site as well as immediately opposite the Boral facility. Appendix 2 and 3 presents the results of testing, equipment used and measurement locations to supplement monitoring conducted at the site.

2 AREA DESIGNATIONS

To ensure consistency we note that to remove confusion we confirm the following

1. Area A and Area 1 on the subject site represent the same area on the site
2. Area B and Area 2 on the subject site represent the same area on the site

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(03) 9272 6800

ABN 11 068 954 343
www.acousticlogic.com.au

3 MDA REVIEW

3.1 ITEM 1 – SECTION 2 SITE DESCRIPTION – PAGE 4

1	High	Section 2 Site Description, Page 4	How have the industrial area premises been identified? MDA seek clarification from ALC that the operation times that have been included in the report are representative of site operations, not solely times when the premises are open to the public. Should the premises operate in the evening and night periods, the assessment should consider the impact during these times.

The industrial area premises directly adjacent to the proposed development were initially identified by a high-level assessment utilizing Google Maps. Visual inspection was subsequently undertaken during noise measurements to validate the Google Maps imagery.

AL's additional site inspections (including a site attendance before 7am on 28 October 2021) and review of measured noise levels via audio playback indicates that the industrial premises operate between 7am to 6pm Monday to Friday ie day time period.

Review of audio recorded from the noise monitor installed on Location 7 as presented in the report prepared by Acoustic Logic dated 4 August 2021 with reference 20180001.2/0408A/R7/BAW indicated **no** industrial noise was audible at that location during the evening and night-time periods.

Further additional supplementary noise monitoring conducted at approximately the same location at (Location 7) was undertaken from 22 to 28 October 2021 (Refer Appendix 2). Audio play back from the monitor also confirms that no industrial noise is audible during the evening and night periods at this location.

On that basis we consider that assessment of industrial noise associated with the industrial units to the west of the site during the evening and night periods is not required.

3.2 ITEM 2 – SECTION 2 SITE DESCRIPTION – PAGE 5

2	High	Section 2 Site Description, Page 5	Boral Asphalt Facility MDA seek clarification from ALC that the operation times for the Boral Asphalt Facility that have been included in the report are representative of site operations, not solely times when the premises are open to the public. Should the premises operate in the evening and night periods, the assessment should consider the impact during these times. MDA also seek clarification of times when deliveries/logistical operations would occur at the Boral Asphalt Facility.

AL has conducted supplementary noise monitoring from 22 to 28 October 2021 at the location indicated in the figure below.

Figure 1 – Supplementary Noise Monitoring for Boral facility

Audio playback of monitoring conducted indicate that the Boral facility is inaudible at this location throughout the monitoring period. Inspection on Old Midland Highway on 22 October 2021 (at 1pm) indicated that Boral facility was in operation, and on 28 October 2021 (at 6:30am) indicated that the Boral facility was in operation during a night-time period.

Given noise levels from Boral operation are inaudible at the subject site ***no further assessment is required*** and ***noise levels are acceptable from operation of the Boral Facility at the subject site*** noting that the facility was in operation including evening and night time periods.

3.3 ITEM 3 – SECTION 2 SITE DESCRIPTION – FIGURE 2 – EXTENT OF BERM

3	Medium	Section 2 Site Description, Figure 2 – Extent of Berm, Page 5	The extension of the berm is not explained in the report. It is assumed that this will assist to mitigate the propagation of traffic noise across the site? What degree of noise mitigation does the berm provide?

Appendix 1 presents detailed information on the proposed berm. The following comments are provided

1. The berm will be a natural berm constructed from soil and fill
2. Will be an extension of the existing natural berm located directly to the east.
3. Comparison of noise from vehicle movement on the Western Freeway with and without the berm is presented below.
4. Analysis indicates that construction of the berm will reduce noise levels by approximately 2 dB(A)

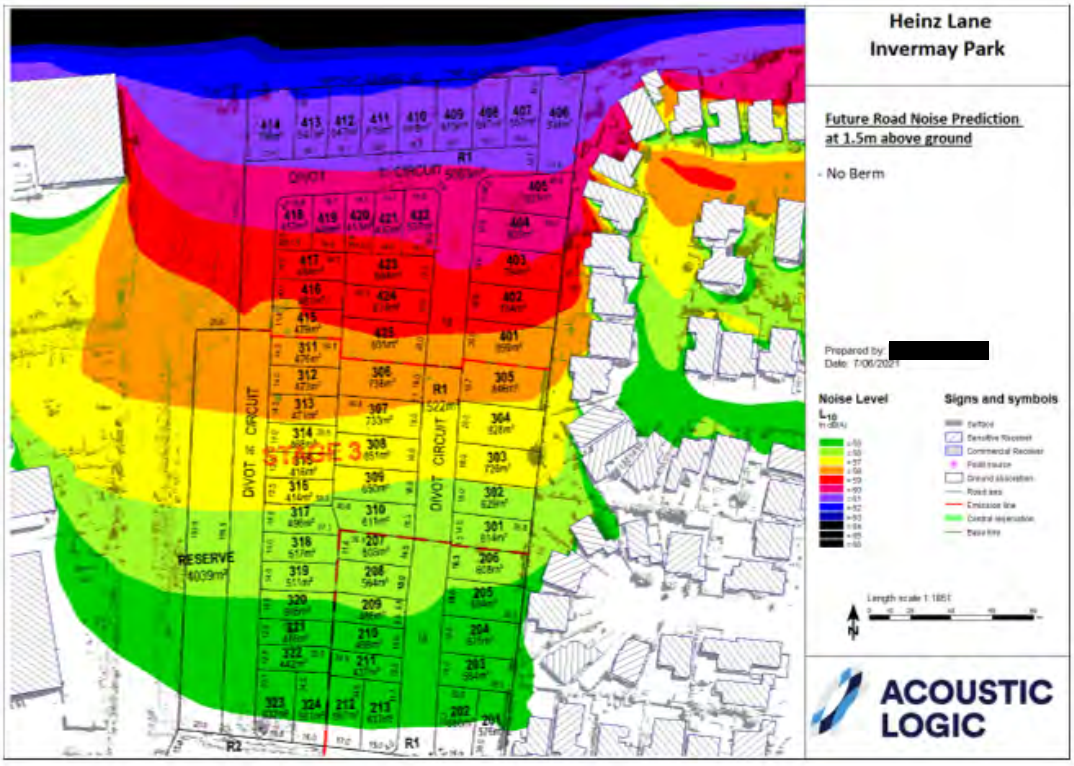


Figure 2 – Predicted traffic noise levels - No Berm

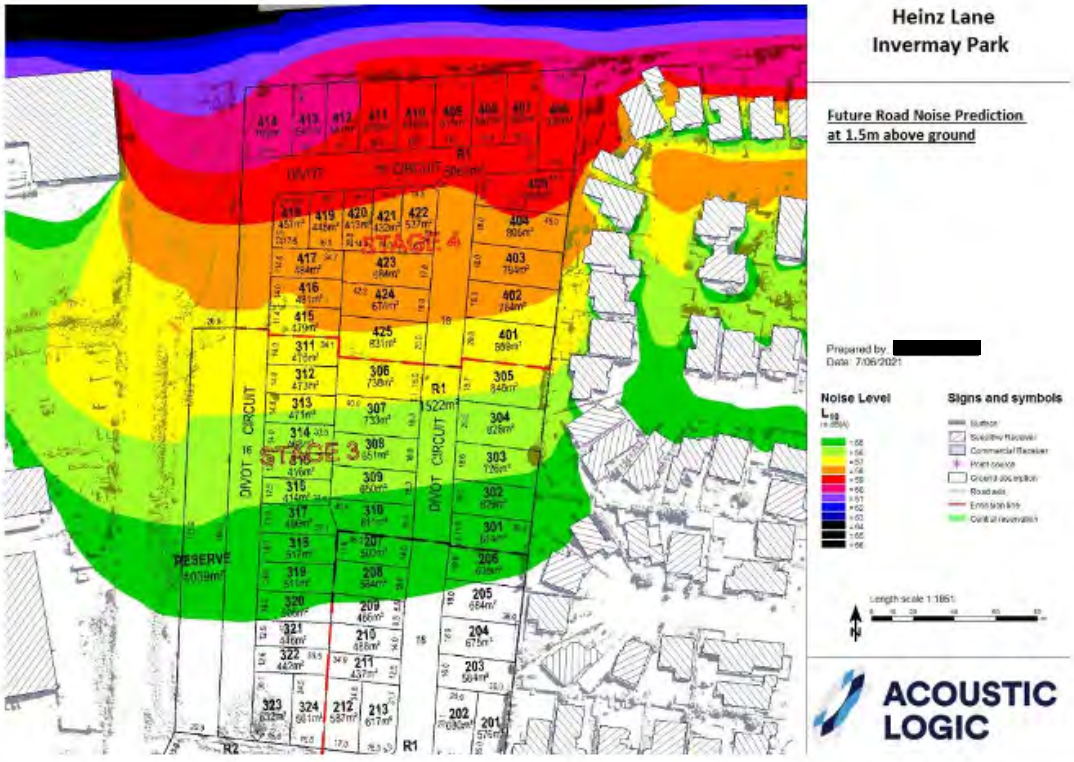


Figure 3 – Predicted traffic noise levels - Berm Installed

3.4 ITEM 4 – SECTION 4 – NOISE LEVEL MEASUREMENT AND SECTION 4.1

4	High	Section 4 Noise Level Measurement and Section 4.1 Measurement Locations, Page 7 and 8	MDA seek clarification from ALC to describe if the background noise measurements are influenced by extraneous noise from surrounding industry? If so, how has this been taken into account when deriving noise criteria?

The noise level is dominated by transportation noise and has been based on measured background noise level and appropriate for site.

In addition, AL has conducted supplementary background measurements in the location indicated in the figure above to validate the results.

Figure 4 – Background noise monitor location

The measured noise levels determined from additional supplementary monitoring are presented in the table below (Refer to Appendix 2)

Table 1 – Additional Measured Background Noise Levels (October 2021)

Period	Time	Measured Background Noise Levels dB(A)$L_{90,period}$
Day	7am-6pm (Mon-Sat)	48
Evening	6pm-10pm (Mon-Sat) 7am-10pm (Sun)	44
Night	10pm-7am	39

Comparison with criteria previously determined criteria and additional monitoring are presented below

Figure 5 – Zoning for EPA Noise Protocol Part 1 Criteria within the Subject Site

Table 2 – Noise Protocol Part 1 Criteria– Original and Supplementary monitoring

Area	Period	Criteria dB(A) Leq		Comments
		Supplementary Monitoring	AL Report	
Area A (Area 1)	Day	57	57	No change
	Evening	51	51	
	Night	46	46	
Area B (Area 2)	Day	54	51	SEPP N-1 noise level criteria increases compared to original criteria
	Evening	47	45	
	Night	42	40	

Review of the above indicates that applicable criteria for Area A (Area 1) remains consistent with that indicated previously while Noise Protocol Part 1 noise criteria is marginally less stringent in Area B (Area 2). The modification does not impact the assessment.

3.5 ITEM 5 – SECTION 4.1 – MEASUREMENT LOCATIONS 7 AND 8

5	Medium	Section 4.1 Measurement Locations 7 and 8, Page 8	In reference to the noise measurements undertaken for Location 7 and 8, were the measurements undertaken at the simultaneously? How do these results compare when considering the train horns?

The measurements undertaken at Location 7 and Location 8 were not conducted simultaneously.

1. The noise monitor at Location 8 was installed between 7 and 13 December 2017. The noise monitor at location Location 7 was installed from 6 to 13 May 2021.
2. Measured L_{max} levels at Location 8 were 92 dB(A) L_{max} which are commensurate with those measured at Location 7.
3. The measured L_{max} is governed by both train pass-bys and horn sounding.
4. The levels presented are the highest 95th percentile recorded. Based on visual inspection, the train horn typically is sounded on approach to Heinz Lane level crossing.

3.6 ITEM 6 – SECTION 4.2 – MEASUREMENT EQUIPMENT

6	Medium	Section 4.2 Measurement Equipment, Page 8	MDA requests ALC confirm if a weather station was installed during the site measurements. If not, how was the weather monitored? Which weather BOM weather station was used and how was the weather considered (i.e. wind direction, precipitation etc) in the assessment of the measured noise data?

No weather station was installed during the site measurements. The weather was monitored via the weather station at Ballarat Airport which is summarised below.

Table 3 – Monitored Wind Speed

Date	Typical Wind Speed / Direction
7 December 2017	8-12km/h (south / east)
8 December 2017	9-16km/h (east) - Rain
9 December 2017	10-19km/h (east / north-east)
10 December 2017	6-11km/h (east / north-east)
11 December 2017	4-12km/h (north / north-west)
12 December 2017	5-14km/h (north-west)
13 December 2017	9-27km/h (south)

Notwithstanding the above, noise modelling from traffic noise was based on CoRTN and traffic volumes as indicated in Section 6.1.1. Modelling predicted 59 dB(A) $L_{10,18hr}$ at noise monitor Location 1 (northern boundary of subject site). Modelling was then corrected to the highest measured noise level which is 61 dB(A) $L_{10,18hr}$ based on measured noise levels at Location 1 which provides a more conservative assessment.

3.7 ITEM 7 – SECTION 4.3 – MEASUREMENT DATE

7	High	Section 4.3 Measurement Date, Page 8	As noted in Lt 001. During the noise measurement undertaken between 6 and 12 May 2020, at the time of COVID restrictions, were industrial/commercial premises operating as normal. No discussion is provided as to whether the noise measurements were representative (for example, from industry/commercial activity), other that noting that traffic volumes were likely reduced during the COVID restriction period.

As indicated above additional supplementary monitoring and inspection was done to verify existing operations with respect to the western industrial area. The levels monitored previously and currently indicate that the assessment remains valid with respect to noise emissions and hours of operation of the industrial estate.

3.8 ITEM 8 – SECTION 4.4.1 – TABLE 3

8	Medium	Section 4.4.1, Table 3 Attended Noise Level Measurements (Traffic North Western Freeway), Page 9	As noted in Lt 001. All noise measurements are in the middle of the day. MDA requests that ALC demonstrate how the assessment takes into account potentially higher noise levels during peak hour traffic movements.

AL's assessment was based using CoRTN and the long-term noise monitoring conducted in Location 1 (7 and 12 December 2017) and indicated Appendix 5 of the acoustic report. The monitor continuously measured noise from traffic movements throughout all time periods. Attended noise level measurements detailed in Table 3 are supplementary measurements only.

3.9 ITEM 9 – SECTION 4.4.2 – TABLE 4

9	High	Section 4.4.2 Background Noise Levels, Table 4 – Un-attended Noise Monitor Measurements (Ambient Noise) – Location 7, Page 9	As noted in Lt 001 Also see MDA Ref No.4 ALC to confirm how the background noise data was processed to remove the influence of the existing industrial/commercial premises and rail noise. It is important that that the environmental noise limits are properly determined in accordance with the Noise Protocol, as these are used to assess the potential impact of the industrial zone on the development

Refer to comments per Item 4 above. We confirm the IF levels are correct and criteria are therefore applicable to the site. Supplementary monitoring indicates that the levels originally reported are also correct and those for Area B (Area 2) based on the additional monitoring and presented in the AL report are conservative compared to that confirmed set out in the Comparison table above.

3.10 ITEM 10 – SECTION 4.4.3 – TRAIN NOISE LEVELS

10	High	Section 4.4.3 Train Noise Levels, Page 10	Section 2 makes reference to both passenger and freight use of the rail line. No distinction between train types has been provided in the assessment. Based on our experience, freight trains are typically a higher noise level compared with passenger trains. ALC to confirm whether the assessment takes into account freight train movement.

The assessment includes Freight movements. Note 1 in Table 7 on page 11 of the report identifies what have been assumed to be freight train pass-bys based on audio playback from the noise monitor.

3.11 ITEM 11 – SECTION 4.4.3 – TRAIN NOISE LEVELS

11	Low	Section 4.4.3 Train Noise Levels, Table 6 – Measured Train Noise Levels, Page 10	What was the L_{Amax} dB noise level associated with the train horns at Location 8? How do these compare with Location 7?

Refer discussion in Item 5 above. Note that the monitoring data has been used from both locations to undertake assessment.

3.12 ITEM 12 – SECTION 4.4.4 – INDUSTRIAL NOISE LEVELS

12	Low	Section 4.4.4 Industrial Noise Levels, Page 11	The report does not provide information about how various noise sources have been identified for the unattended measurements at Location 7 and 8. MDA seek clarification from ALC to describe how different noise sources were identified.

Refer to Appendix 3 which identifies the various noise sources for the industrial noise to the west of subject site.

3.13 ITEM 13 – SECTION 4.4.4 – INDUSTRIAL NOISE LEVELS

13	High	Section 4.4.4 Industrial Noise Levels, Page 11	The noise measurements used in the assessment are noted to have been undertaken in 2017. MDA seek clarification from ALC that the measurements remain representative of the activities in the industrial precinct.

Refer Appendix 3 for our comments with respect to the western industrial area. Supplementary measurements indicate that current operation of the Industrial area has not changed and as such are representative.

3.14 ITEM 14 – TABLE 8 – MEASURED INDUSTRIAL NOISE LEVELS

14	High	Table 8 – Measured Industrial Noise Levels, Page 11	The following comments apply to all data provided in Table 8: • Not clear what the $L_{eq,\ 30\ mins}$, dB includes, in the data provided i.e. activities, sources of noise and influence, • Is this the highest $L_{eq,\ 30\ mins}$, dB, across the monitoring period? • Has allowance been made for types and duration of noise generated at each industrial site? Have adjustments been made for noise character i.e. tonality, impulse, intermittency?

Refer our discussion in Appendix 3. We note that the industrial noise levels comply with EPA Noise Protocol Part 1 day time criteria.

3.15 ITEM 15 – TABLE 8 – MEASURED INDUSTRIAL NOISE LEVELS

15	High	Table 8 – Measured Industrial Noise Levels, Note 1, Page 11	See comment MDA Ref No 1 and 2

Boral asphalt is not audible at the subject site nor does it impact proposed residential lots at the sub-division. Noise from operation of the Industrial Area comply with criteria for the day-time period as indicated in Appendix 3. Industrial noise was not audible during the evening and night time period based on monitoring audio playback.

3.16 ITEM 16 – TABLE 8 – MEASURED INDUSTRIAL NOISE LEVELS

16	High	Table 8 – Measured Industrial Noise Levels, Note 2, Page 11	Given the size of the Boral Plant and the nature of their operation, further detail should be provided as part of the ALC assessment to demonstrate that the noise from the operations will not impact on the development site and the presence of noise-sensitive uses in the development site will not curtail Boral's operations. This includes assessment of evening and night operations, if relevant. Also see comments MDA Ref No 2.

Boral asphalt is not audible at the site nor impacts proposed residential lots at the sub-division. Refer our discussion in Item 2 above.

3.17 ITEM 17 – SECTION 5.2

17	Medium	Section 5.2 Train Noise Level Criteria from the Ballarat-Maryborough Railway, Page 12	It is acknowledged that vibration may not be a significant issue for the site from passenger trains. As stated in Section 2, freight train types use the line. These train types can generate significant vibration. It is recommended that ALC provide further information for their justification for not undertaking assessment of vibration.

Vibration measurements were not undertaken based on the location of the two nearest dwellings Lot 222 and Lot 414 being 36 metres and 45 metres from the rail tracks.

Based on past projects we note that tactile vibration at these distances will not impact human comfort and as such residential dwellings will not require vibration isolation.

AL has assessed residential and noise sensitive developments adjacent to rail corridors since 1994 including sub- division projects similar to the subject site. Examples of projects include Bradmills, the regional rail link and others clearly indicate that vibration isolation to the rail corridor with setbacks significantly closer to the rail corridor do not require isolation nor assessment of ground borne vibration.

Further, Lot 1 (Stage 1) which is currently under construction has been issued a Planning Permit without condition and does not require isolation. For Lot 2 (stages 2-4) all proposed Lot's within the subdivision (with the exception of lot 222) are located further from the rail corridor than those in Lot 1 (Stage 1).

Based on the above, we confirm that no assessment for vibration associated with the rail corridor is required.

In addition, it has been confirmed by Villawood that the Purchasers have been advised of the proximity of the development to the rail corridor as indicated in Section 32.

3.18 ITEM 18 – TABLE 11

18	Medium	Table 11 – Internal Railway Noise Level Criteria for Dwellings within Zone of Influence, Page 13	The L_{Amax}, dB criteria level is high if there are multiple events occurring at that level. If as noted there is only ONE event then the L_{Amax} 65 dB could be considered acceptable. It is recommended that the Sleep Disturbance criteria set out ion NSW Road Noise Policy 2011 is considered, that concludes: • *Maximum internal noise levels below 50-55dB L_{Amax} are unlikely to awaken people from sleep* • *One or two events per night, the maximum internal noise levels of 65-70dB L_{Amax} are not likely to affect health and wellbeing significantly*

As indicated in Table 7 there is typically one train pass-by event during the night-time period, whilst two events were noted on 9 May 2021. Based on this, in our opinion the proposed criteria are adequate to address rail noise.

Notwithstanding the criteria have been adopted on other sub-division developments along the Rail Regional link corridor and adopted by other consultants on similar projects. Further the DDO for the Regional Rail Link specifically nominates the criteria nominated by Acoustic Logic as the assessment criteria applicable to development adjacent to the rail corridor. In our opinion the criteria are appropriate and suitable.

3.19 ITEM 19 – SECTION 5.3.1

19	Medium	5.3.1 Zoning Level, Page 14	MDA are in general agreement with the approach to include sets of Zoning Levels given the large size of the site. This provides a view on the likely change in noise criteria across the site. However, reviewing the Zone Levels on the western site of the site MDA calculate that the levels should be 1dB lower for the Day, Evening and Night periods. MDA seek clarification from ALC to confirm the noise limits for the western site of the site.

Our analysis indicates that the zoning level noted in the report are correct.

3.20 ITEM 20 – TABLE 14

20	Medium	Table 14 – Internal Noise Level Criteria, Note 1, Page 15	The internal noise criteria are considered appropriate. MDA request clarification from ALC to determine if alternative methods of background and purge ventilation are to be provided where windows and doors are required to be kept closed to meet the internal noise level criteria?

AL have provided indicative requirements for dwelling construction depending on the applicable zoning requirements which in principle shall incorporate acoustic treatment such as internally lined cushion head boxes, acoustic flexible ductwork or similar treatment.

In addition, AL have specified that the dwellings within the Zone of Influence (noted in Section 7.3 of the report) shall be assessed by a qualified acoustic consultant to meet the nominated performance requirements. This project is not dissimilar to other projects. Where criteria are exceeded, it will necessitate windows to be closed to address external noise intrusion.

It has been confirmed by Villawood that the requirements of Section 7.3 of the acoustic report are noted in the Section 32 and Special Conditions requirements provided to each Purchaser.

3.21 ITEM 21 – TRAFFIC NOISE LEVELS

21	Medium	Section 6.1.1 Traffic Noise Levels, Table 15 – Traffic Noise Levels at 'Measurement Location 1', Page 16	ALC to confirm that Location 1 is representative of the predicted noise levels and is NOT subject to shielding

AL confirm that the predicted noise levels in Table 15 does not take into account the future shielding from the proposed natural berm extension.

3.22 ITEM 22 – SECTION 6.1.1. TRAFFIC NOISE LEVELS

22	Medium	Section 6.1.1 Traffic Noise Levels, Page 16 And 6.1.3 SoundPlan Modelling, Item 1, Page 17	It is not clear from the information in the report or from the noise contour maps provided in Appendix 1, as to how the traffic noise levels have been adjusted to represent measurements at Location 1. It is not possible to validate the approach based on the description provided or through the review of the noise contours provided in Appendix 1. Has the model been adjusted to reflect the measured noise levels? ALC to confirm how the extension of the roadside berm referenced in Figure 2, has been considered to allow for the accurate comparison of the measured noise levels with the modelled noise levels

The traffic modelling was conducted using the following methodology:

- The initial modelling was conducted based on CoRTN analysis which indicate 59 dB(A) $L_{10,18hours}$ at noise monitor Location 1.
- Predicted traffic noise levels were adjusted to obtain 61 dB(A) $L_{10,18hours}$ at noise monitor Location 1 based on the highest measured noise levels as a conservative assessment.
- The traffic flow is further adjusted include increase in traffic movement over the 10 year period.
- The natural berm (detailed in Appendix 1) was added to the north of subject site as indicated in the report.

3.23 ITEM 23 – TABLE 16

23	Low	Table 16 – Predicted Future Traffic Count, Page 6	ALC to confirm the metric of traffic data provided in Table 16.

Table 4 – Traffic Data

Year	Predicted Future Traffic Count	Year	Predicted Future Traffic Count
2020	17,000[1]	2027	18,997
2021	17,272	2028	19,301
2022	17,548	2029	19,610
2023	17,829	2030	19,924
2024	18,114	2031	20,243
2025	18,404	2032	20,567
2026	18,698		

Note 1 – Based on the traffic data provided by VicRoads Open Data Hub.

3.24 ITEM 24 – TABLE 6.1.3

24	Medium	6.1.3 SoundPlan Modelling, Page 17	It is expected that calculation modelling assumptions are included in the report, including propagation conditions, traffic speed and road surface type. MDA requests that ALC outline these model inputs in the report.

Refer the following:

- Propagation condition: 0.5 was used for ground effect.
- Traffic speed: 110km/hr
- The road surface: Bituminous surface

3.25 ITEM 25 – 6.2 TRAIN NOISE LEVEL ANALYSIS

25	Medium	6.2 Train Noise Level Analysis, Page 18	It is not clear why the train horns have been modelled as a moving line source. It would be expected that the measured noise levels could be used as the basis for a point source calculation. It is not possible to validate the noise predictions in the model as the predicted noise levels shown on the contour map do not show levels higher than 90 L_{Amax}, dB (Appendix 2)

To clarify, train horns have been modelled as moving point source. The purpose of the SoundPlan modelling is to indicate the future lots that are within the zone of influence. An updated contour map can be provided to show levels higher than 90 dB(A) L_{max}.

3.26 ITEM 26 – 6.2 TRAIN NOISE LEVEL ANALYSIS

26	Low	6.2 Train Noise Level Analysis, Paragraph 4, Page 18	This statement assumes there is no variation in the track, train speed is constant. These are unlikely to be valid assumptions.

We do not agree with the statement, and we believe assumptions are correct for train speed. Observations on site of train movement confirm the trains are constant as they enter the site and progress past the site. (ie no stopping and starting). This has been based on observations of multiple passenger train pass bys from Maryborough heading south past the site were appeared constant. In any case assessment has been based on measured noise levels.

3.27 ITEM 27 – TABLE 17

27	Medium	Table 17 Assessment of External Measured Train Noise Levels, Page 18	The Passenger Rail Infrastructure Noise Policy provides thresholds for investigation and is not a compliance assessment policy. It would be expected that ALC consider Sleep Disturbance, external amenity specified in the Environmental Reference Standard (under section 93 of the Environmental Protection Act 2017) and internal amenity due to rail noise.

We do not concur with MDA. The approach for sub-divisions is consistent with that adopted on other developments adjacent to rail corridors similar to this. Further DDO overlays on other projects have adopted the same design criteria of 65 dB(A) L_{max} and 40 dB(A) L_{eq} 8 hour. Criteria are based on that successfully adopted as part of many estates sub-divisions along the Regional Rail Link.

Notwithstanding, the residential dwellings currently under construction at Lot 1 (directly south of subject site) has the same proximity to the train line and was accepted with no specific acoustic requirements by Council.

3.28 ITEM 28 – SECTION 6.3 INDUSTRIAL NOISE

28	High	6.3 Industrial Noise Level Analysis, Page 18 and 19	The approach adopted by ALC to assess noise from the industrial area needs to be expanded to consider specific noise sources from the various activities that may impact on the received noise levels at the proposed development. Numerous items have been raised in this review that need to be addressed to provide an accurate assessment of industrial noise impacts. Further items that ALC need to consider include: • Further assessment to confirm that operations from the precinct are compliant with the Noise Protocol. For example, a search on Google maps indicated that there is a foundry opposite Lot 221/222. Further, other industry sites along the industrial precinct eastern boundary have storage yards facing onto the proposed development. It is unclear whether these sites have been taken into account in the assessment. • Is there a requirement to preserve the industrial precinct, based on the current assessment it is likely that complaints may be generated from the residents from proposed development

The noise from the industrial precinct to the west consists of activities including angle grinding, pipe cutting, forklift movements which occur sporadically. We confirm that based on measurements / inspection, that noise levels over 30-minute period are governed by the traffic noise from the Western Freeway. In addition, Appendix 3 provides comments with respect to the supplementary measurement / assessment of the western industrial area.

Villawood have confirmed that all Purchasers are made aware of the industrial area to the west via Section 32 and Special Conditions. We also note that the residential dwellings currently under construction at Lot 1 (directly south of subject site) have the same proximity to the western industrial area and was accepted with no specific acoustic requirements by Council.

3.29 ITEM 29 – SECTION 6.3 INDUSTRIAL NOISE

29	High	6.3 Industrial Noise Level Analysis, Page 19	See MDA Ref No. 2 MDA seeks clarification on the following items in relation to noise from the Boral Asphalt Plant: • What analysis has been undertaken to demonstrate that noise from the Boral Asphalt site does not contribute to the subject site, other than attended measurements? (i.e. have calculations been performed?) • Was any noise from the Boral site apparent during lulls in traffic? • Were the measurements undertaken during down-wind conditions? • Is noise from the Boral site apparent during the evening and night period when traffic noise reduces? • Confirm that Boral plant was operational during the noise measurement period

Refer our response in Item 2 above. Supplementary measurements indicate that noise from operation of the Boral facility was not audible at any stage at the supplementary monitoring locations.

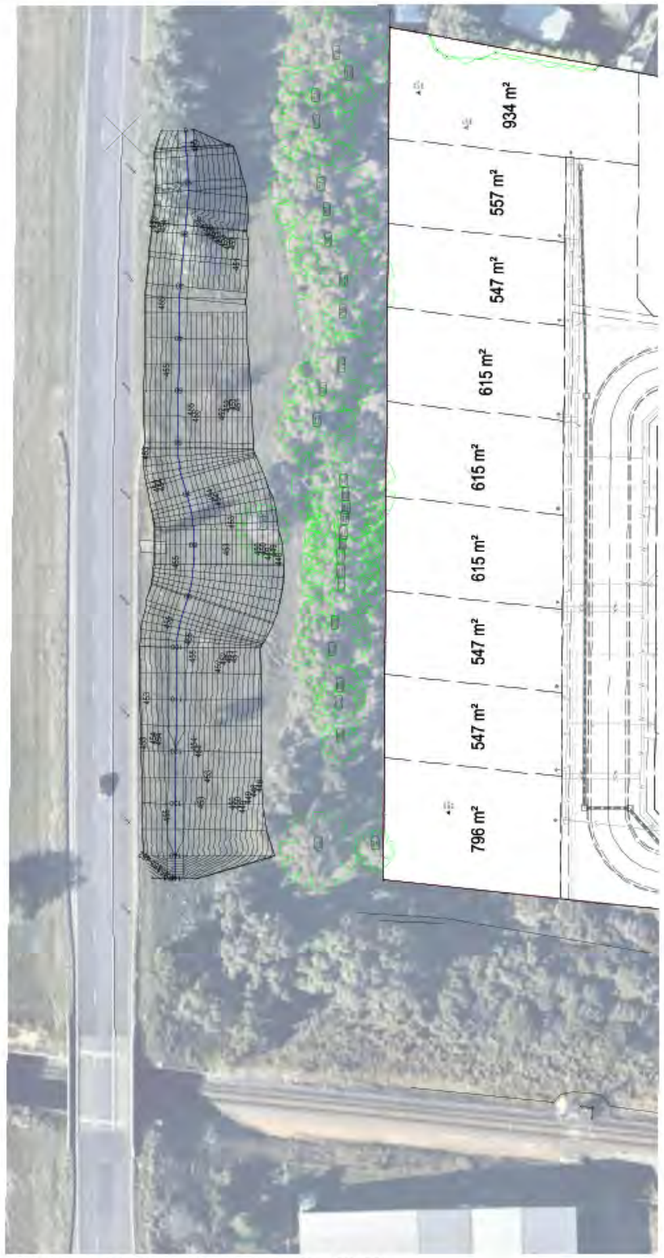
We trust this information is satisfactory. Please contact us should you have any further queries.

Yours faithfully,

Acoustic Logic Consultancy Pty Ltd

[redacted]

APPENDIX 1 – BERM DESIGN



SOUND MOUND BARRIER LAYOUT PLAN
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PROJECT: Drew's PADDOCK
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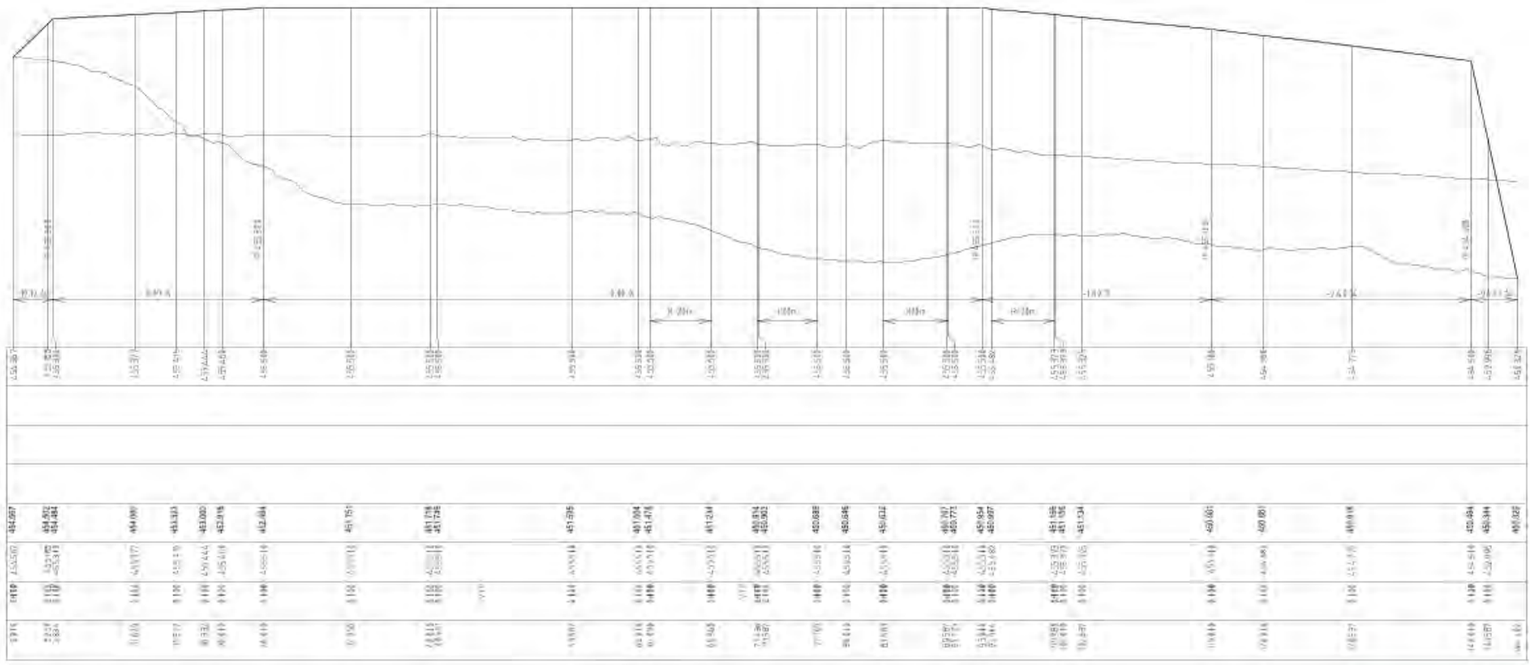

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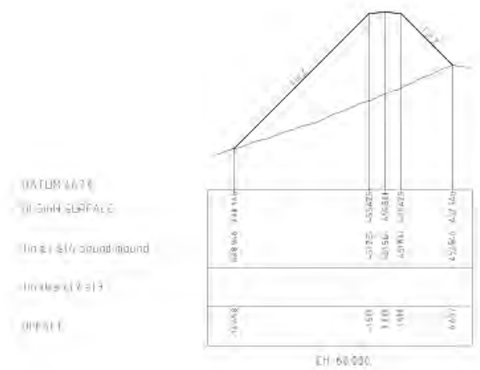

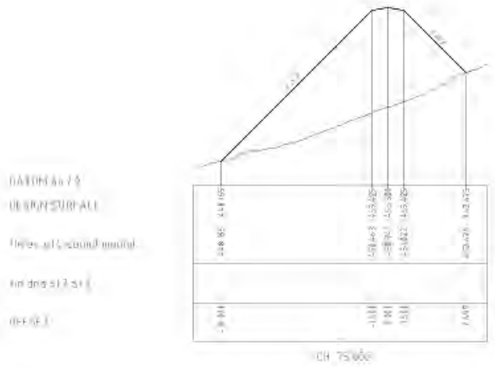

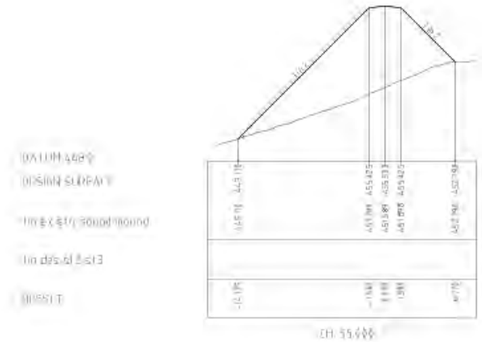

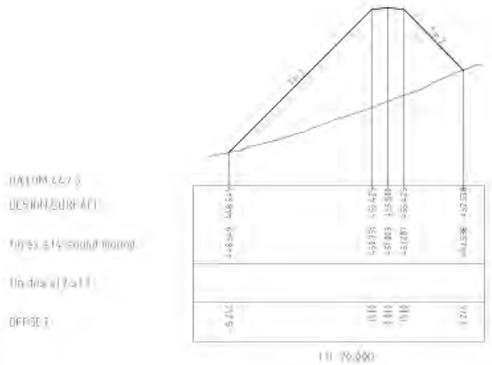

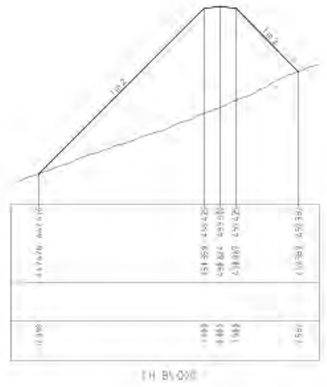

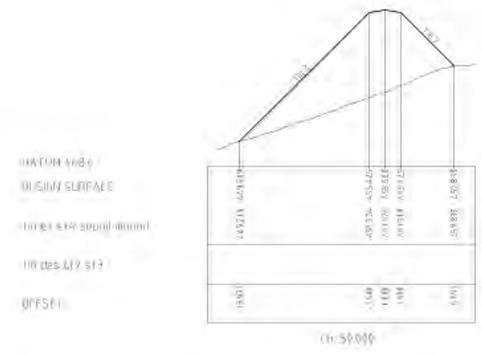

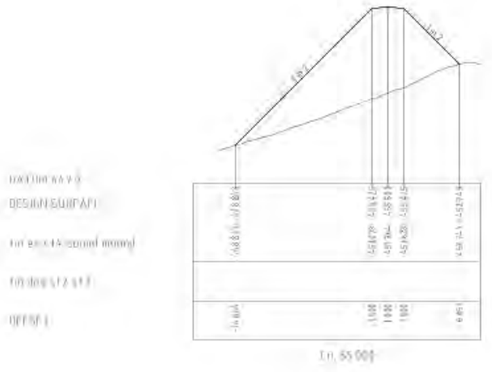

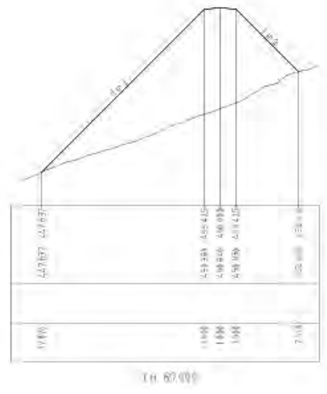

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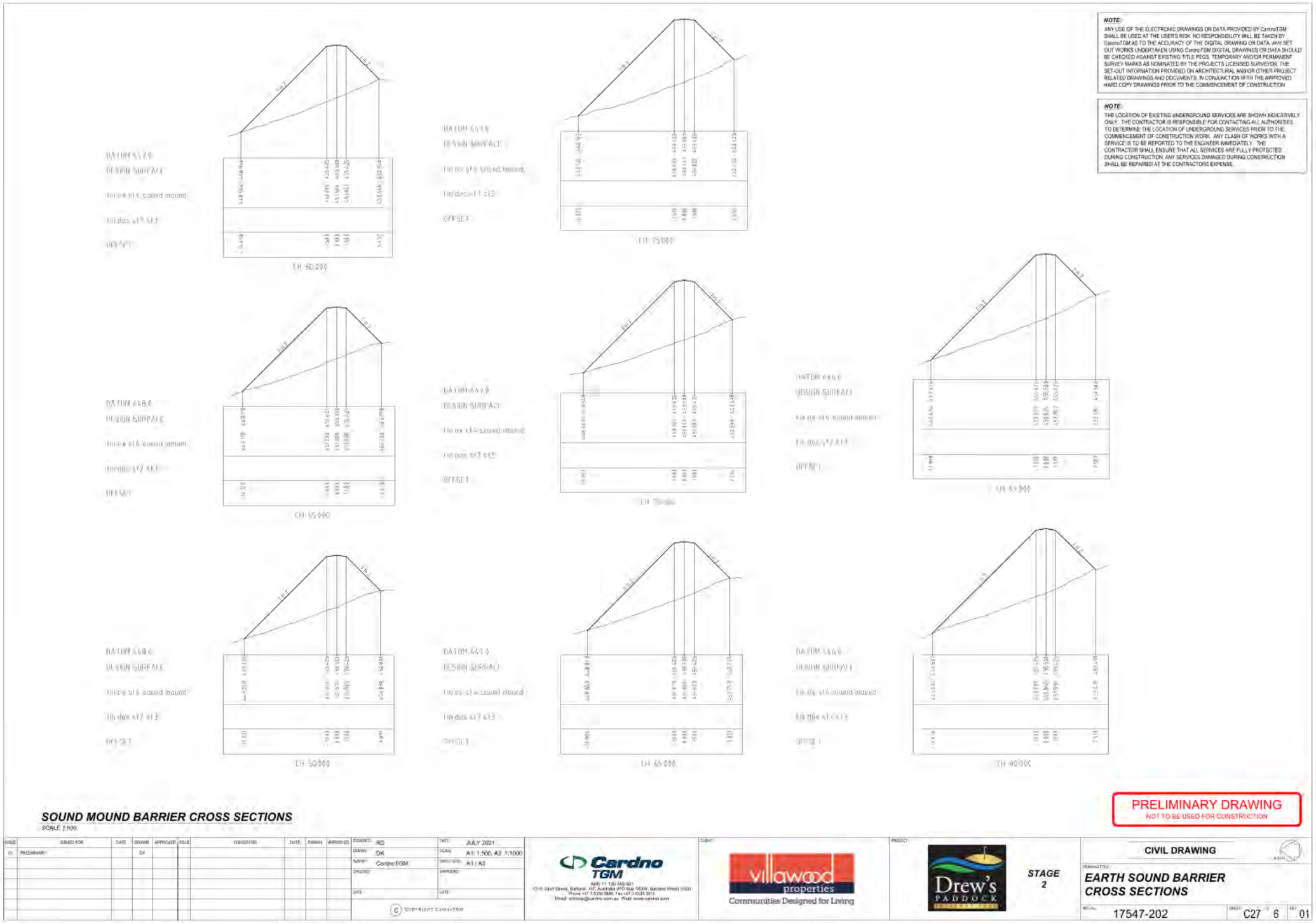
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THE LOCATION OF EXISTING UNDERGROUND SERVICES ARE SHOWN INDICATIVELY ONLY. THE CONTRACTOR IS RESPONSIBLE FOR CONTACTING ALL AUTHORITIES TO DETERMINE THE LOCATION OF UNDERGROUND SERVICES PRIOR TO THE COMMENCEMENT OF CONSTRUCTION WORK. ANY CLASH OF WORKS WITH A SERVICE IS TO BE REPORTED TO THE ENGINEER IMMEDIATELY. THE CONTRACTOR SHALL ENSURE THAT ALL SERVICES ARE FULLY PROTECTED DURING CONSTRUCTION. ANY SERVICES DAMAGED DURING CONSTRUCTION SHALL BE REPAIRED AT THE CONTRACTORS EXPENSE.
SOUND MOUND BARRIER CROSS SECTIONS
SCALE 1:500
PRELIMINARY DRAWING
NOT TO BE USED FOR CONSTRUCTION
ISSUED FOR
PRELIMINARY
DESIGNED: RD
DRAWN: DK
SURVEY: Cardno TGM
CHECKED:
DATE: JULY 2021
SCALE: A1: 1:500, A3: 1:1000
APPROVED:
DATE:
Cardno TGM
villawood properties
Communities Designed for Living
Drew's PADDOCK
STAGE 2
CIVIL DRAWING
EARTH SOUND BARRIER CROSS SECTIONS
17547-202
C27
6
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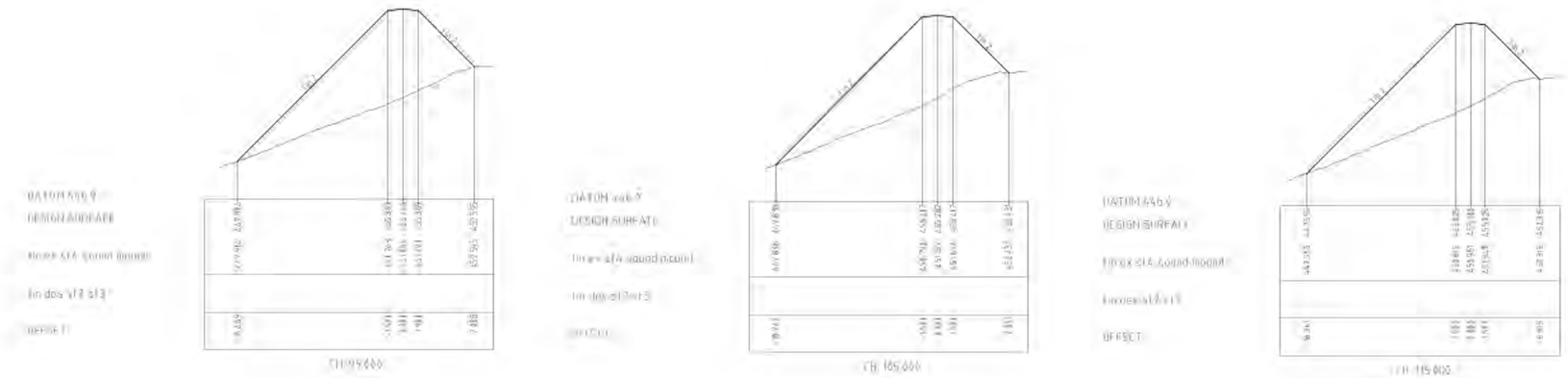

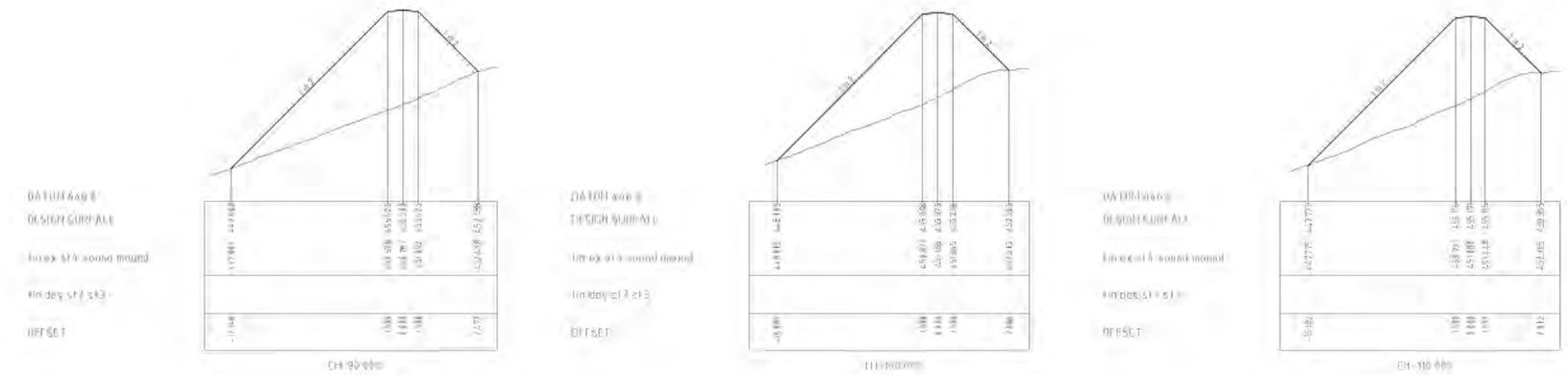

SOUND MOUND BARRIER CROSS SECTIONS

SCALE 1:500

PRELIMINARY DRAWING
NOT TO BE USED FOR CONSTRUCTION

ISSUE	ISSUED FOR	DATE	DRAWN	APPROVED
01	PRELIMINARY		DK	

DESIGNED:	RD	DATE:	JULY 2021
DRAWN:	DK	SCALE:	A1: 1:500, A3: 1:1000
SURVEY:	Cardno TGM	SHEET SIZE:	A1 / A3
CHECKED:		APPROVED:	
DATE:		DATE:	

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Ph 5 Grant Street, Ballarat, VIC Australia (PO Box 1934K, Ballarat West) 3350
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villawood properties
Communities Designed for Living

Drew's PADDOCK

STAGE 2

CIVIL DRAWING

EARTH SOUND BARRIER CROSS SECTIONS

17547-202 | C28 | 6 | 01

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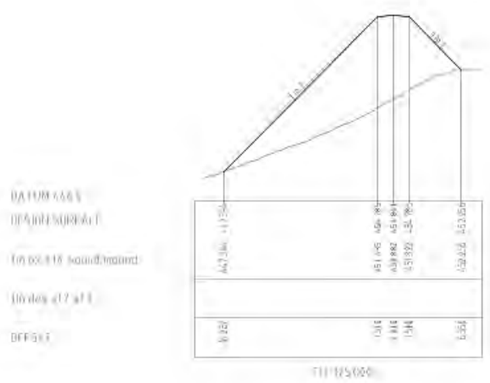

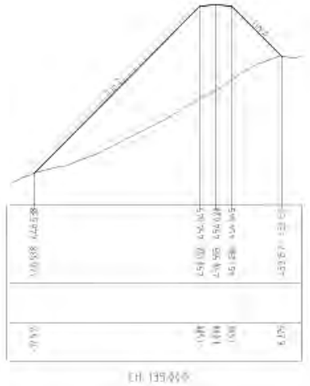

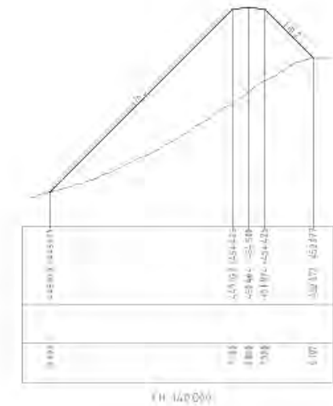

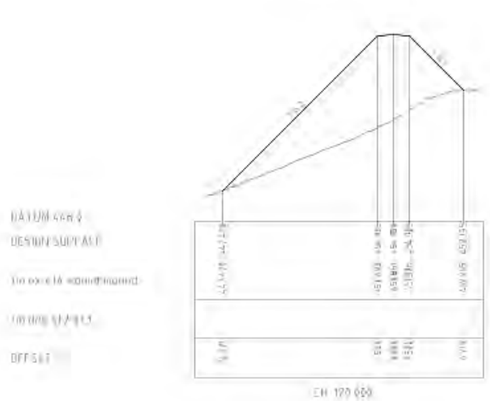

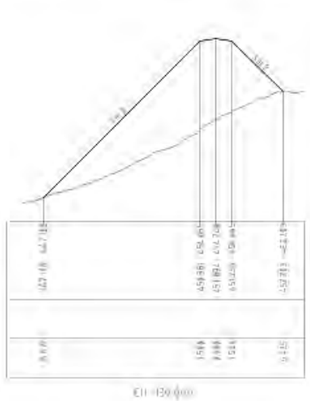

SOUND MOUND BARRIER CROSS SECTIONS

SCALE 1:500

PRELIMINARY DRAWING
NOT TO BE USED FOR CONSTRUCTION

ISSUE	ISSUED FOR	DATE	DRAWN	APPROVED
D	PRELIMINARY		DK	

DESIGNED: RD — DATE: JULY 2021
DRAWN: DK — SCALE: A1: 1:500, A3: 1:1000
SURVEY: Cardno TGM — ORIGINAL SIZE: A1 / A3
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DATE: — DATE:

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Email ballarat@cardno.com.au Web www.cardno.com

villawood properties
Communities Designed for Living

Drew's PADDOCK

STAGE 2

CIVIL DRAWING

EARTH SOUND BARRIER CROSS SECTIONS

17547-202 | C29 | 6 | 01

APPENDIX 2 – MONITORING DATA

Measurement Location

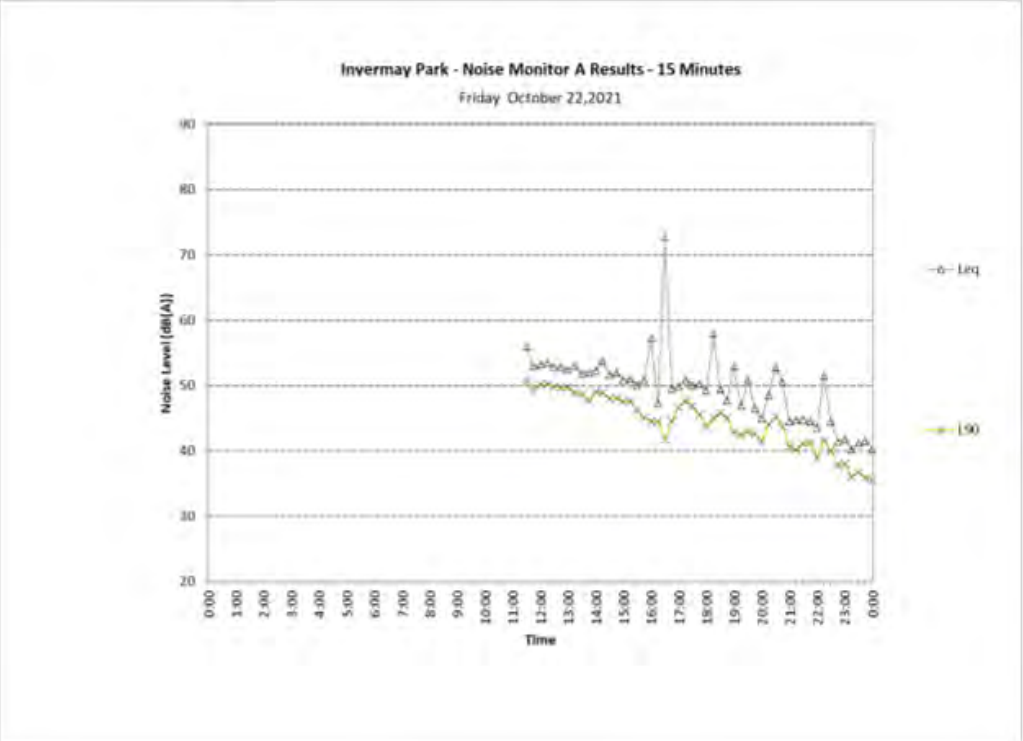
The following measurement equipment was used for the supplementary noise monitoring:

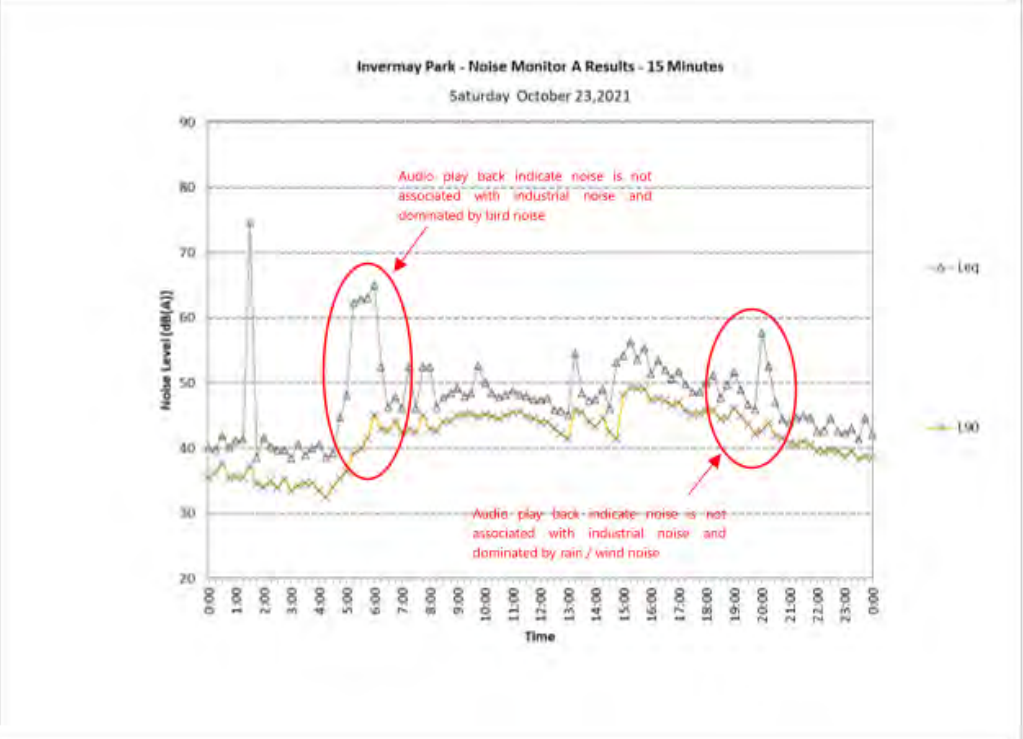
Figure 6 – Supplementary noise monitoring locations

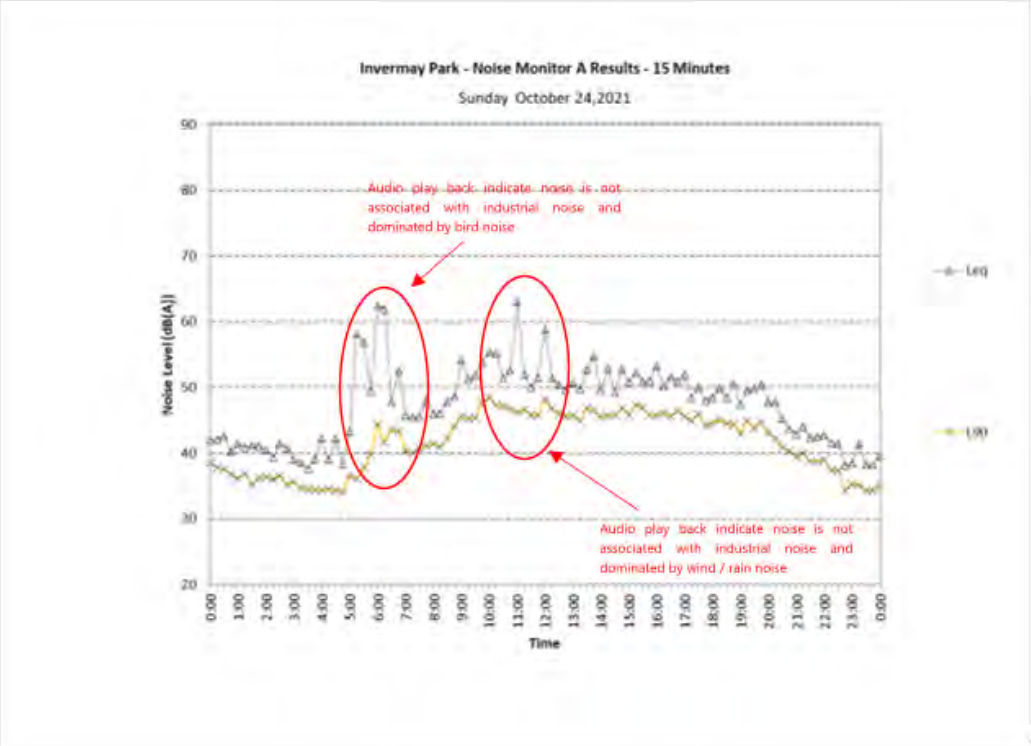
Measurement Equipment

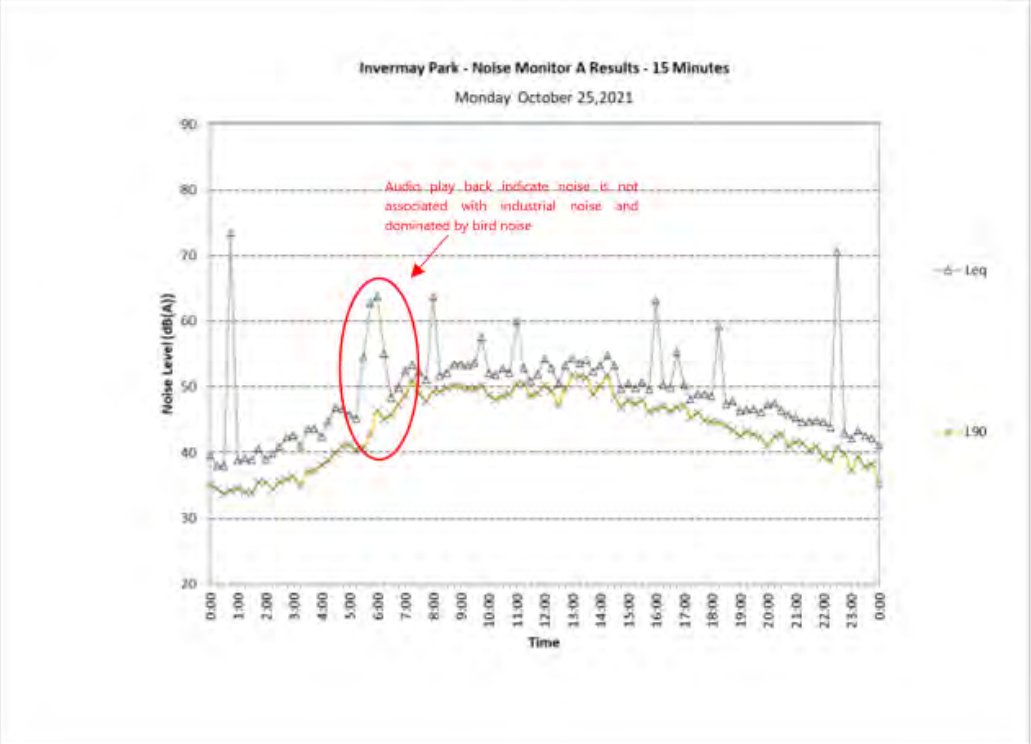
The un-attended noise monitoring was conducted using Ngara noise monitors for locations A, B, C and D and an ARL-315 for location E. All Ngara's were setup to record audio content for playback purposes. The equipment was calibrated at the beginning and the end of the measurements using a Rion NC-74 Sound Calibrator. No significant drift was detected. All measurements were taken on fast response mode.

Measurement Results






Invermay Park - Noise Monitor A Results - 15 Minutes
Sunday October 24,2021
Audio play back indicate noise is not associated with industrial noise and dominated by bird noise
Audio play back indicate noise is not associated with industrial noise and dominated by wind / rain noise
Noise Level (dB(A))
Time
Leq
L90


Invermay Park - Noise Monitor A Results - 15 Minutes
Monday October 25,2021
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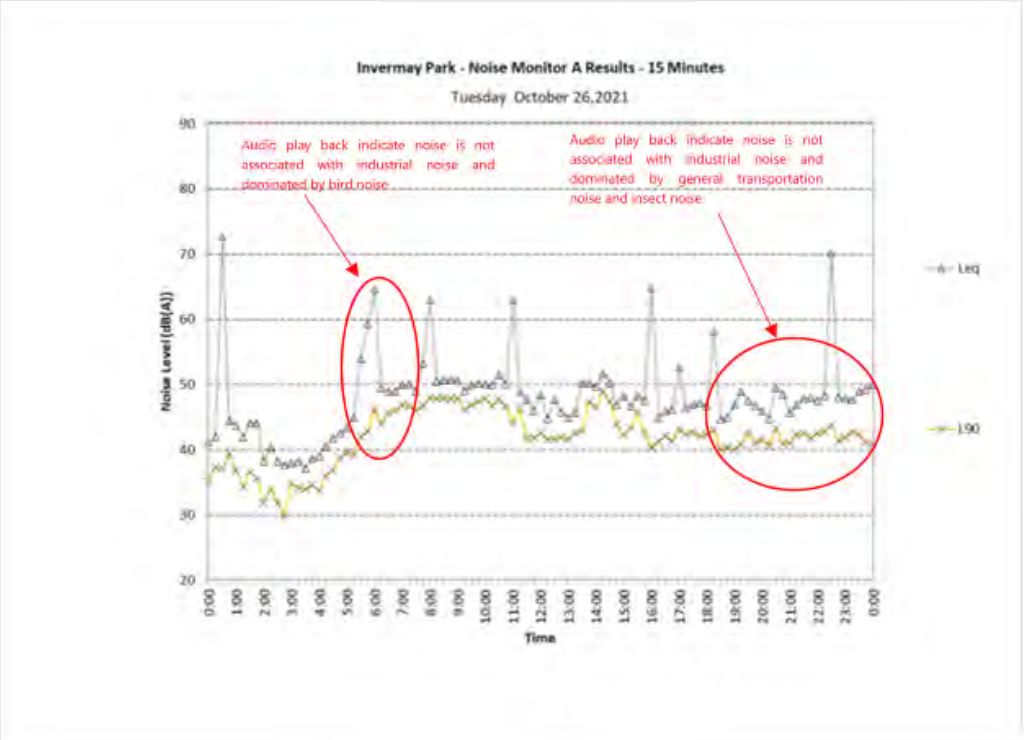
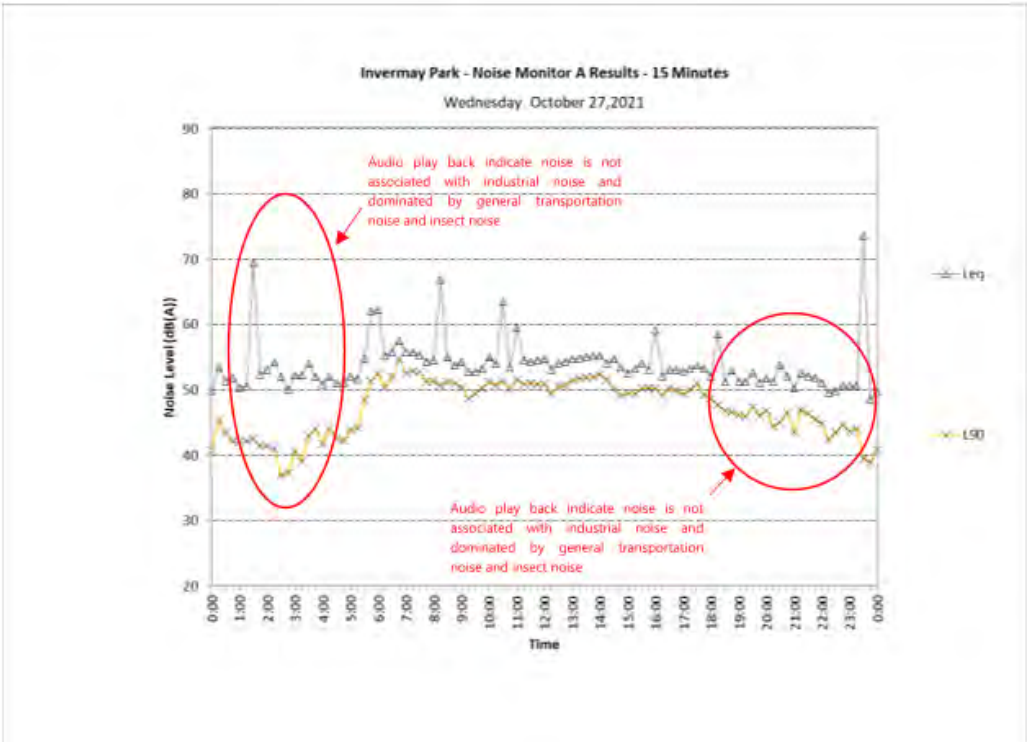
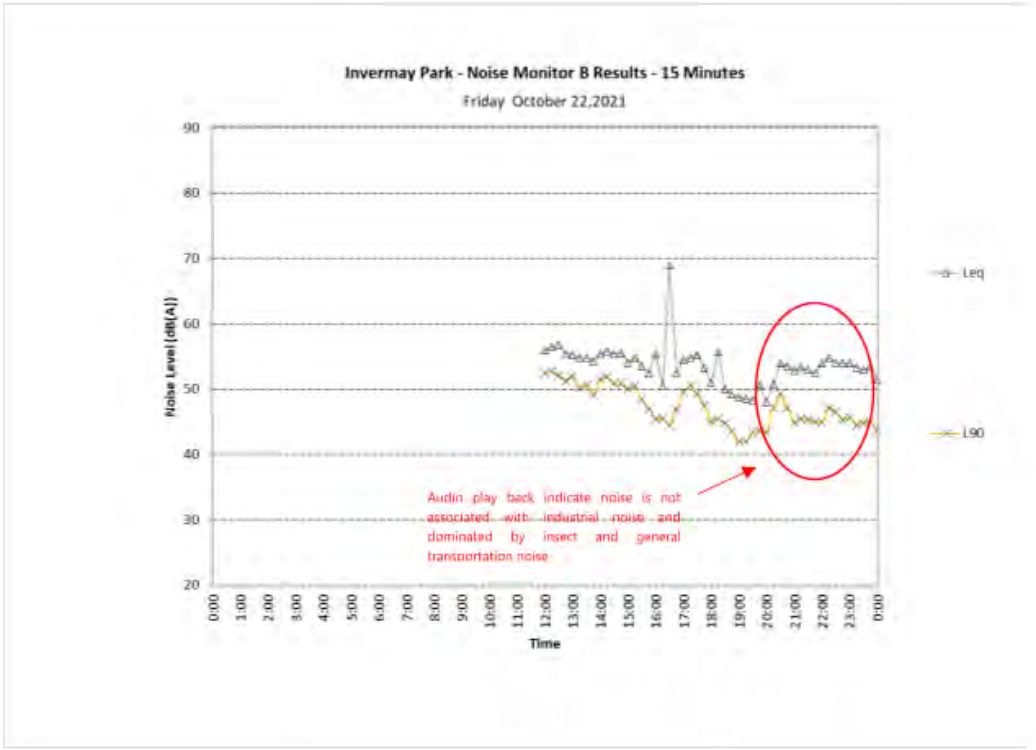
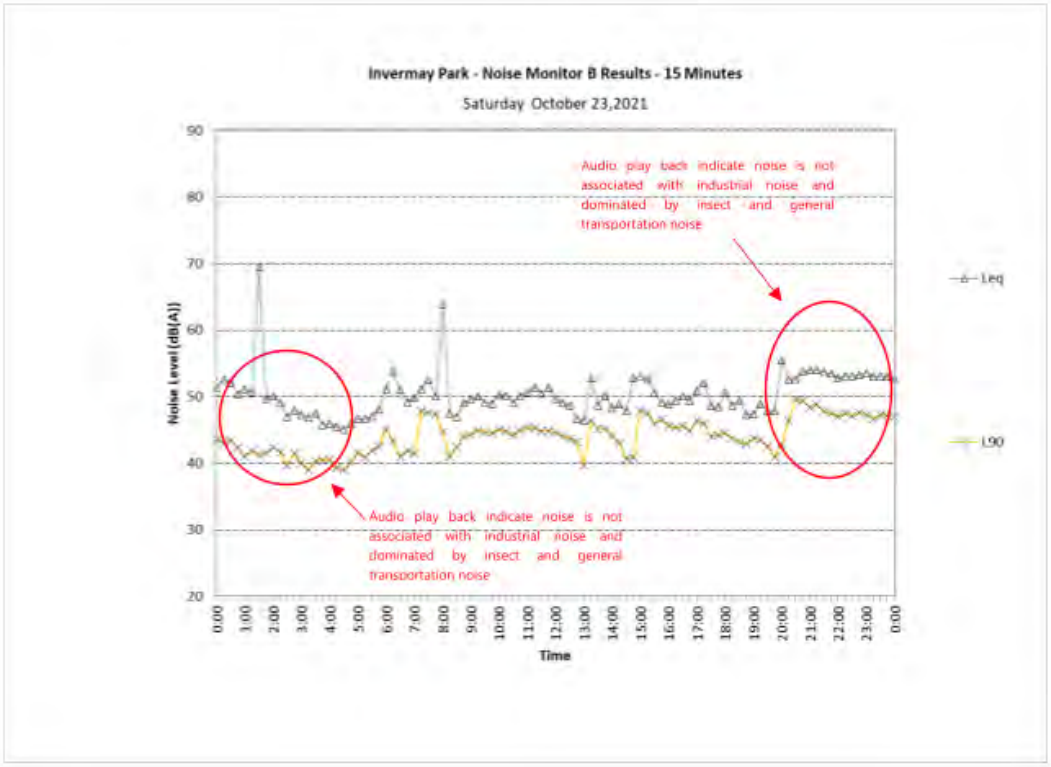
Noise Level (dB(A))
Time
Leq
L90


Invermay Park - Noise Monitor A Results - 15 Minutes
Tuesday October 26,2021
Audio play back indicate noise is not associated with industrial noise and dominated by bird noise
Audio play back indicate noise is not associated with industrial noise and dominated by general transportation noise and insect noise
Noise Level (dB(A))
Time
Leq
L90


Invermay Park - Noise Monitor A Results - 15 Minutes
Wednesday October 27,2021
Audio play back indicate noise is not associated with industrial noise and dominated by general transportation noise and insect noise
Audio play back indicate noise is not associated with industrial noise and dominated by general transportation noise and insect noise
Noise Level (dB(A))
Time
Leq
L90


Invermay Park - Noise Monitor B Results - 15 Minutes
Friday October 22,2021
Noise Level (dB(A))
Time
Leq
L90
Audio play back indicate noise is not associated with industrial noise and dominated by insect and general transportation noise


Invermay Park - Noise Monitor B Results - 15 Minutes
Saturday October 23,2021
Noise Level (dB(A))
Time
Leq
L90
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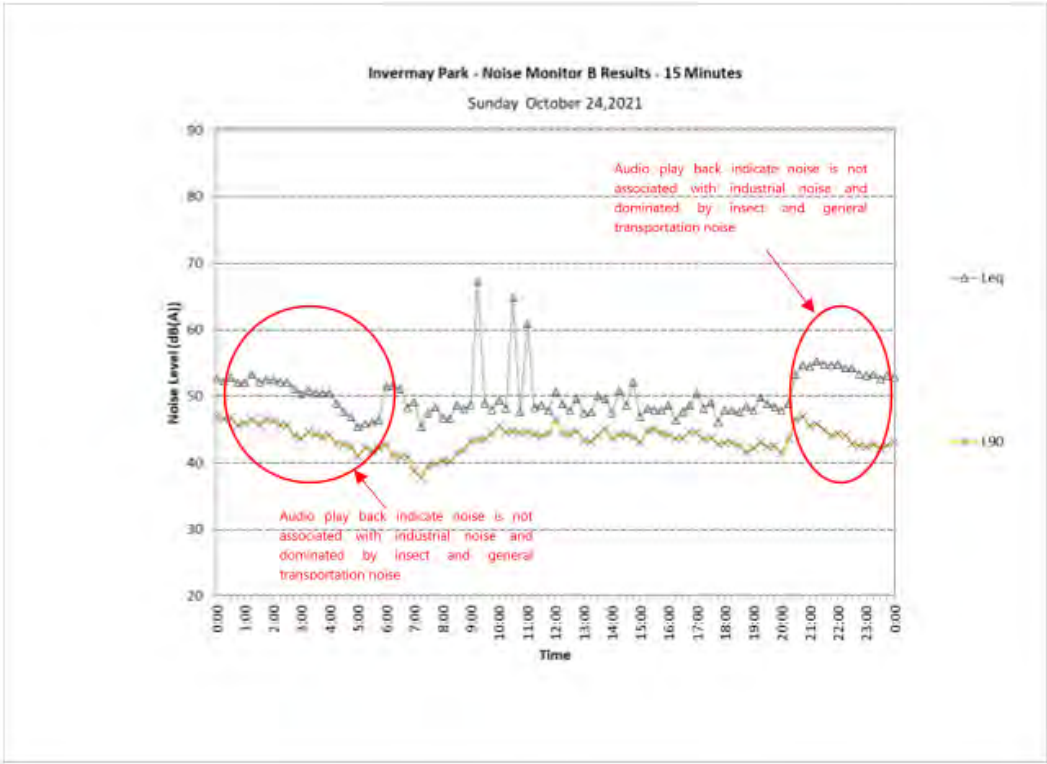
Audio play back indicate noise is not associated with industrial noise and dominated by insect and general transportation noise


Invermay Park - Noise Monitor B Results - 15 Minutes
Sunday October 24,2021
Noise Level (dB(A))
Time
Leq
L90
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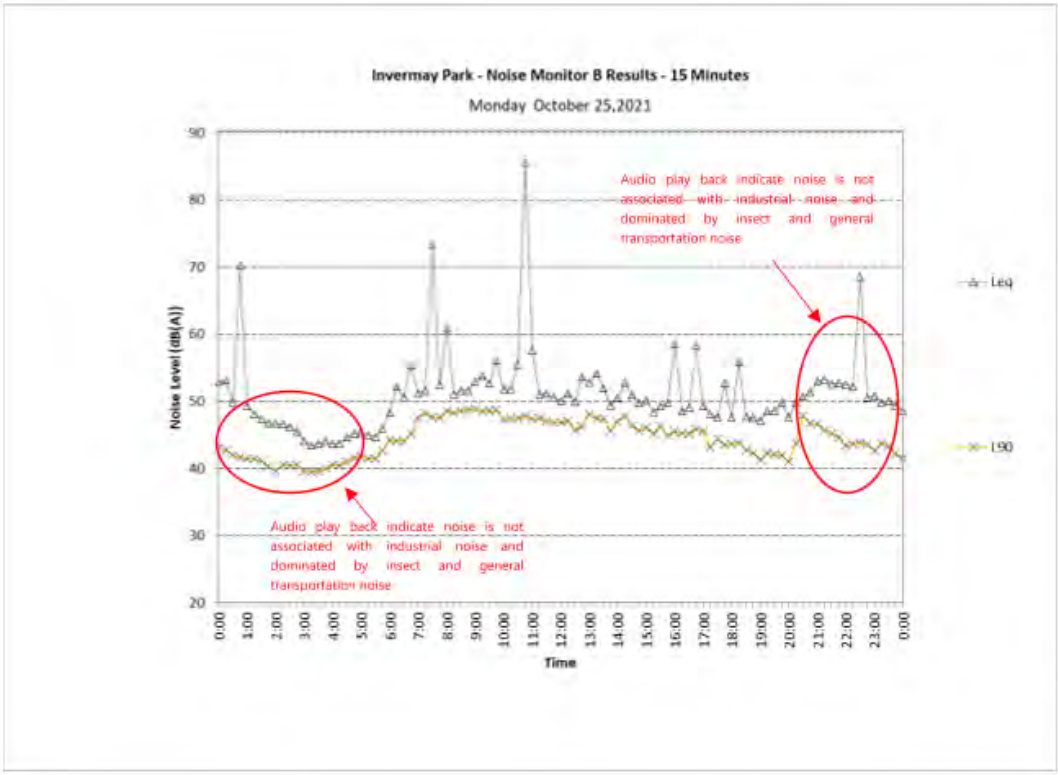
Audio play back indicate noise is not associated with industrial noise and dominated by insect and general transportation noise


Invermay Park - Noise Monitor B Results - 15 Minutes
Monday October 25,2021
Noise Level (dB(A))
Time
Leq
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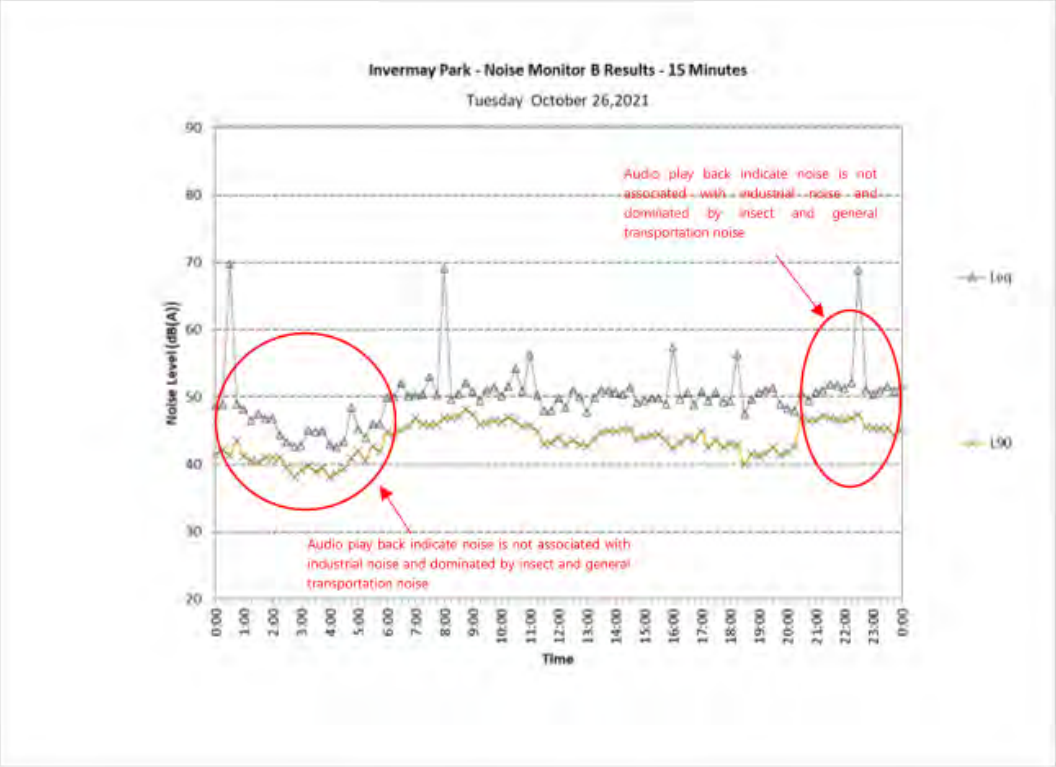
Audio play back indicate noise is not associated with industrial noise and dominated by insect and general transportation noise


Invermay Park - Noise Monitor B Results - 15 Minutes
Tuesday October 26,2021
Noise Level (dB(A))
Time
Leq
L90
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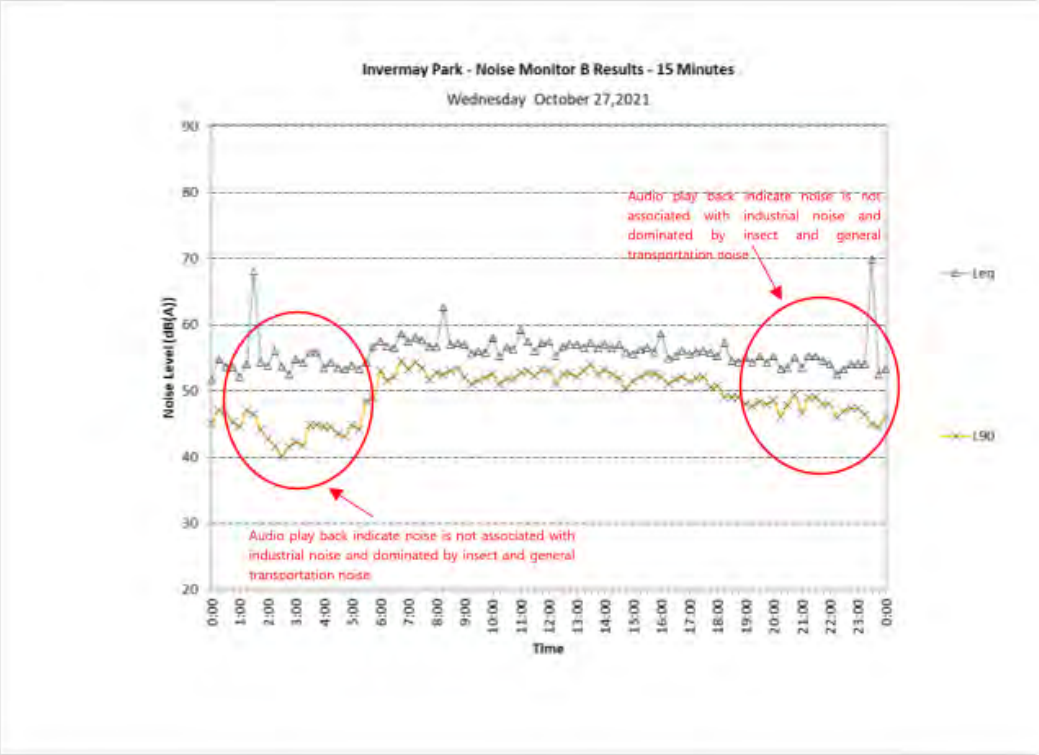
Invermay Park - Noise Monitor B Results - 15 Minutes
Wednesday October 27,2021
Noise Level (dB(A))
Time
Leq
L90
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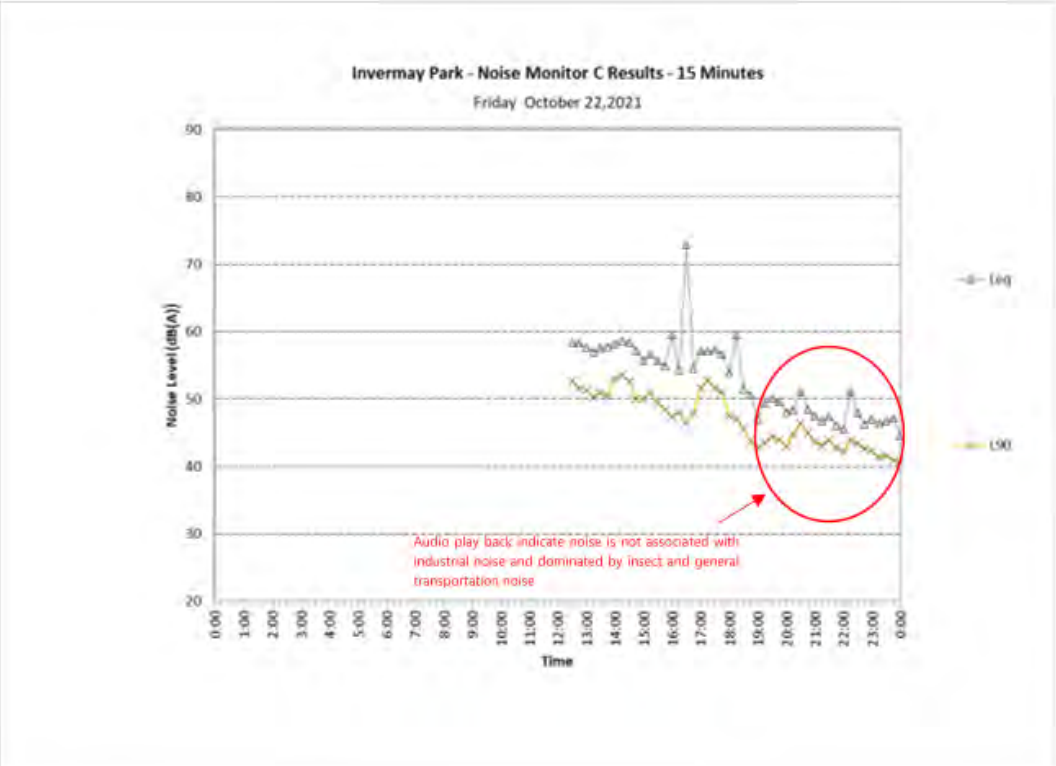
Audio play back indicate noise is not associated with industrial noise and dominated by insect and general transportation noise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Friday October 22,2021
Noise Level (dB(A))
Time
Leq
L90
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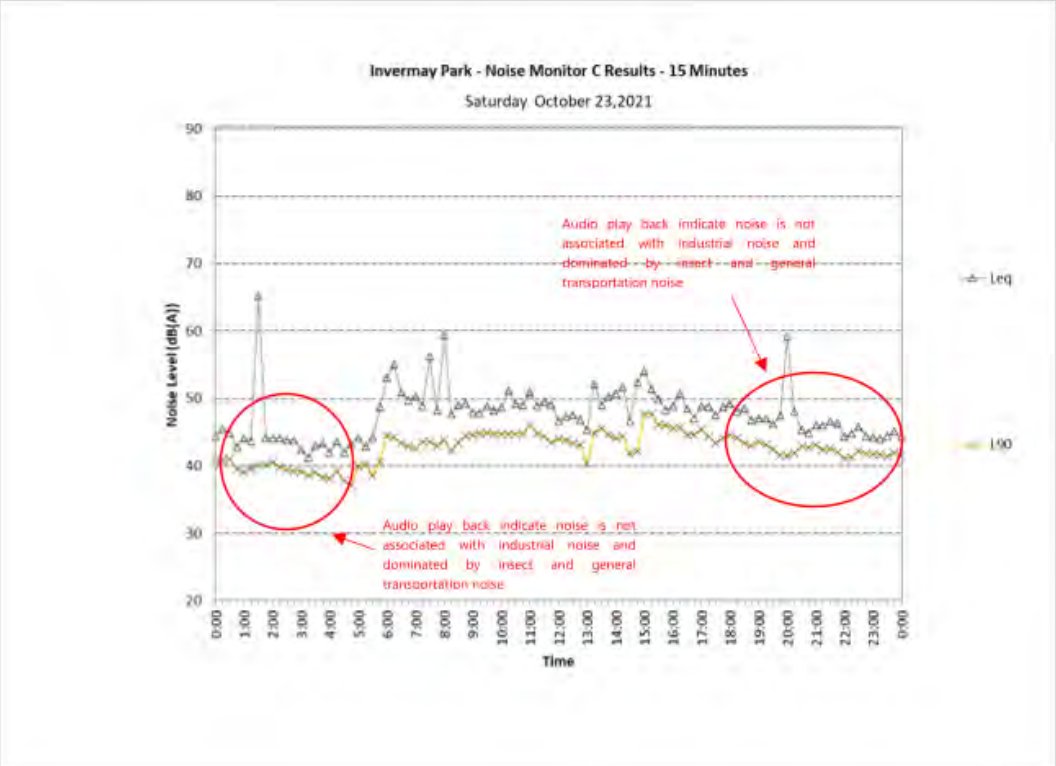
Invermay Park - Noise Monitor C Results - 15 Minutes
Saturday October 23,2021
Noise Level (dB(A))
Time
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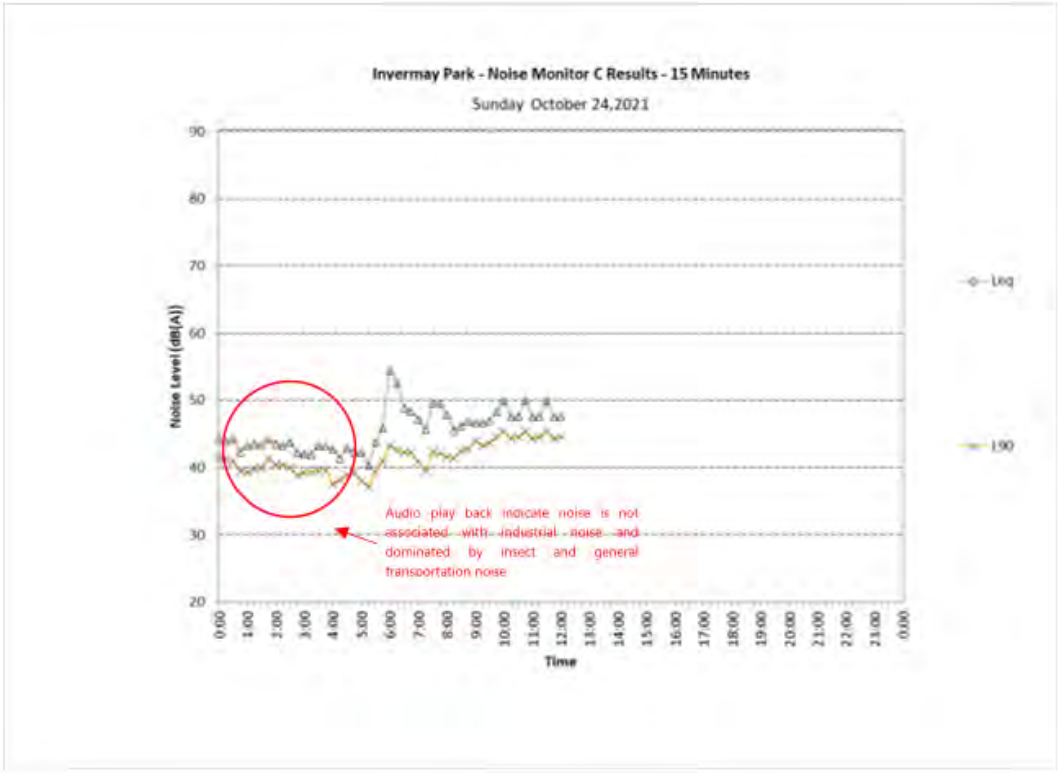
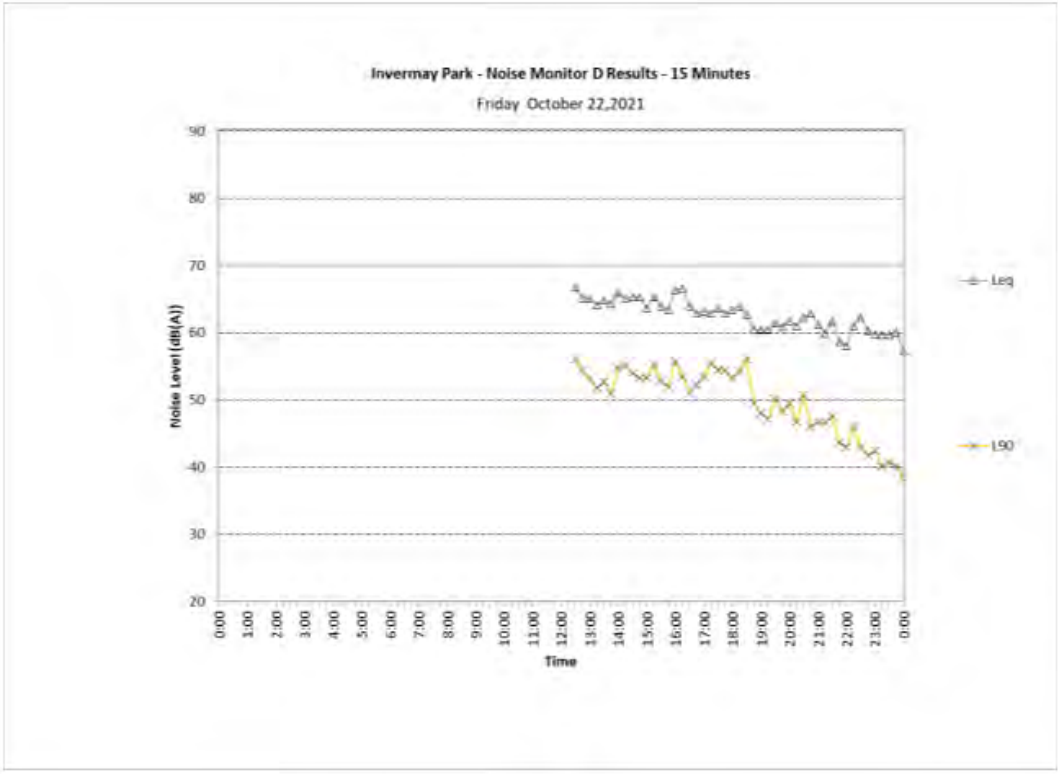
Audio play back indicate noise is not associated with industrial noise and dominated by insect and general transportation noise


Invermay Park - Noise Monitor C Results - 15 Minutes
Sunday October 24,2021
Noise Level (dB(A))
Time
Leq
L90
Audio play back indicate noise is not associated with industrial noise and dominated by insect and general transportation noise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Noise Level (dB(A))
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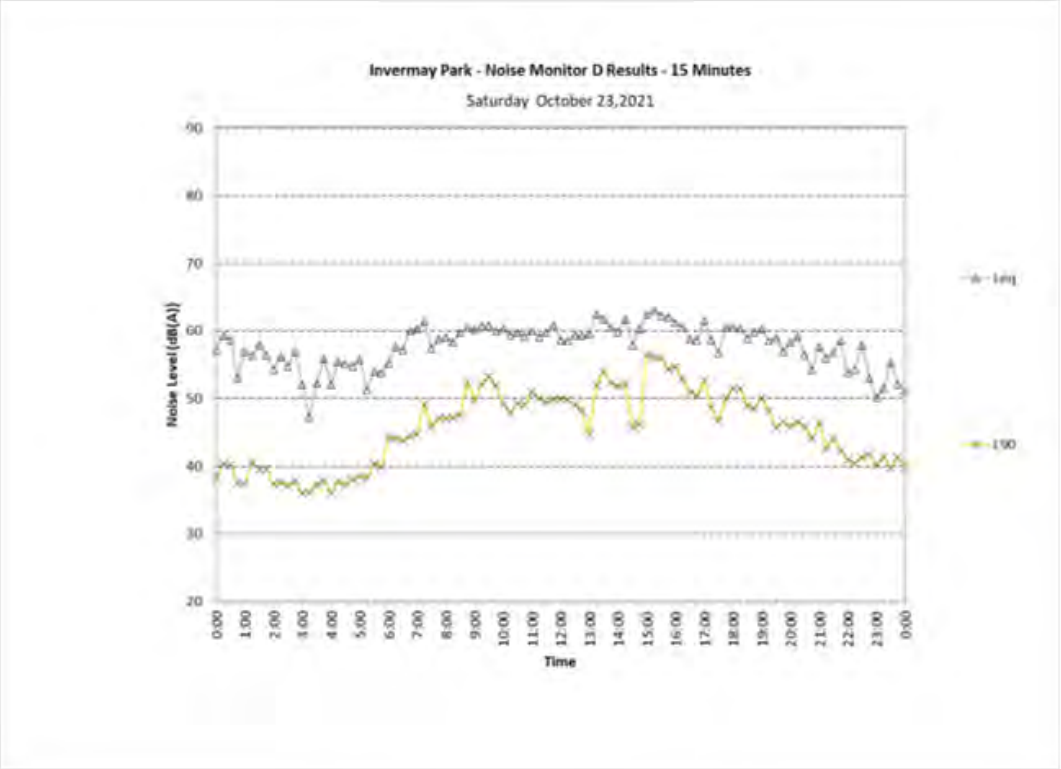
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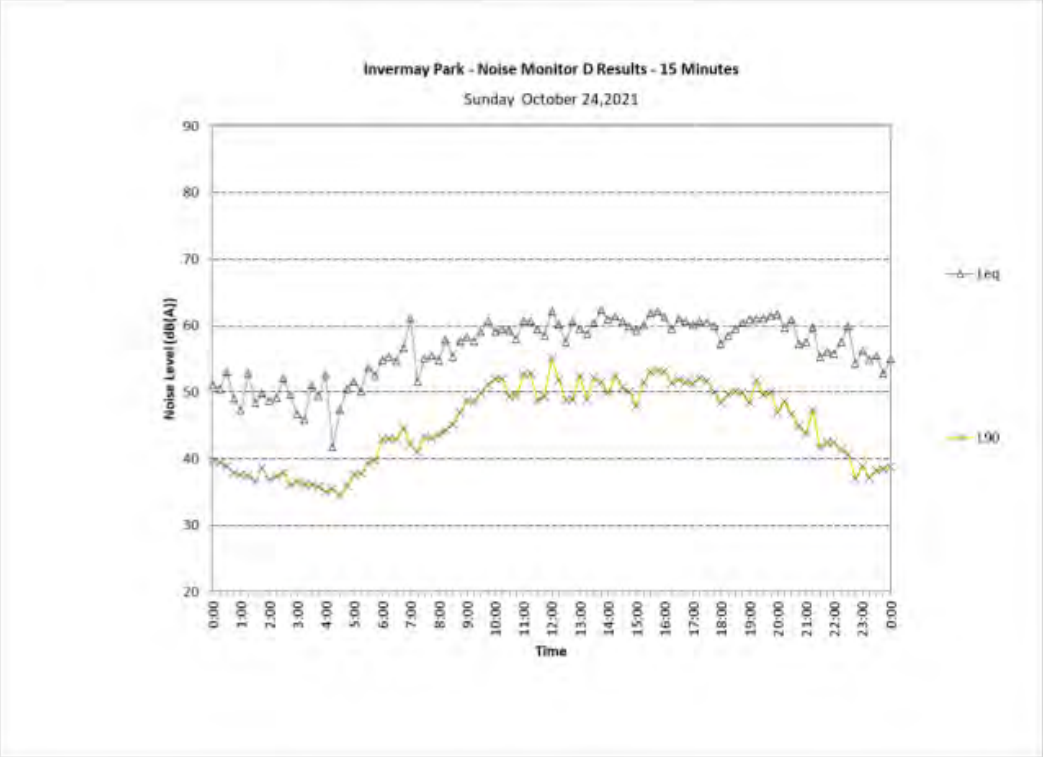
Noise Level (dB(A))
Time
Leq
L90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Noise Level (dB(A))
Time
Leq
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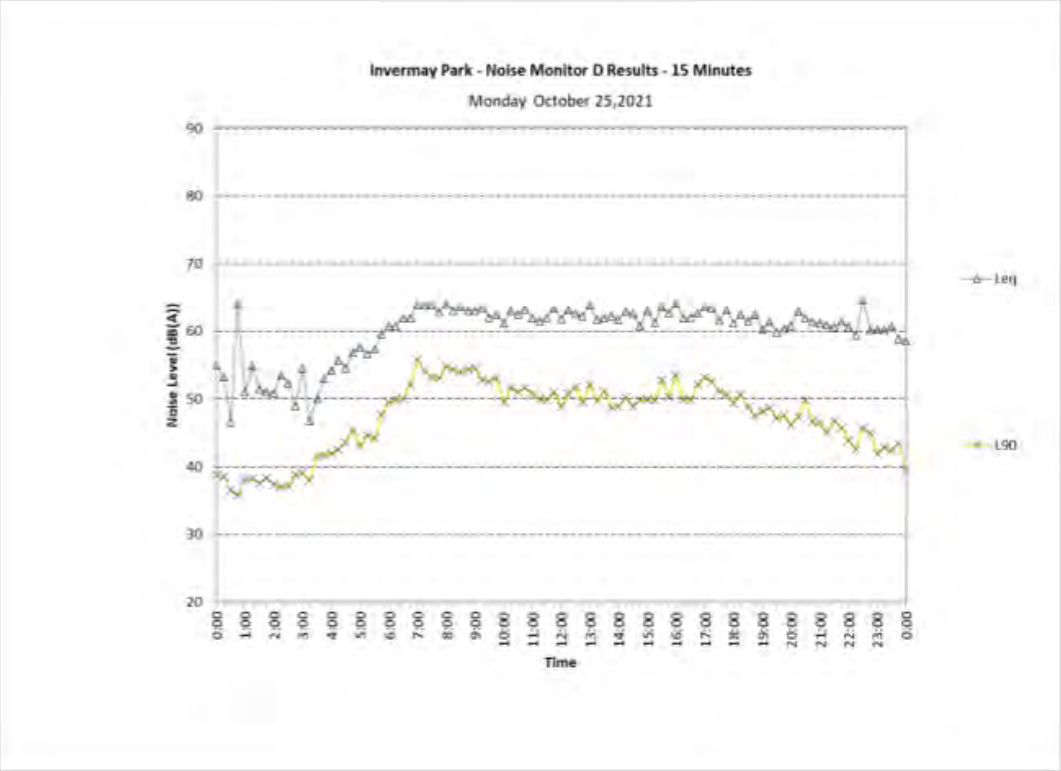
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Monday October 25,2021
Noise Level (dB(A))
Time
Leq
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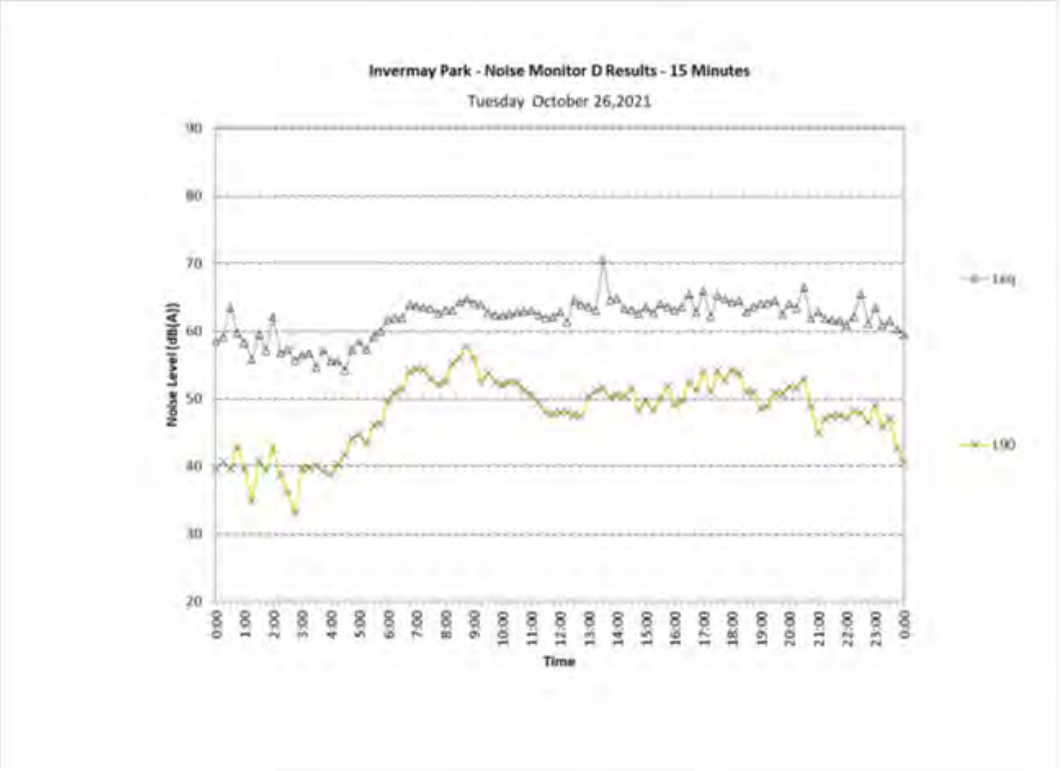
Invermay Park - Noise Monitor D Results - 15 Minutes
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Noise Level (dB(A))
Time
Leq
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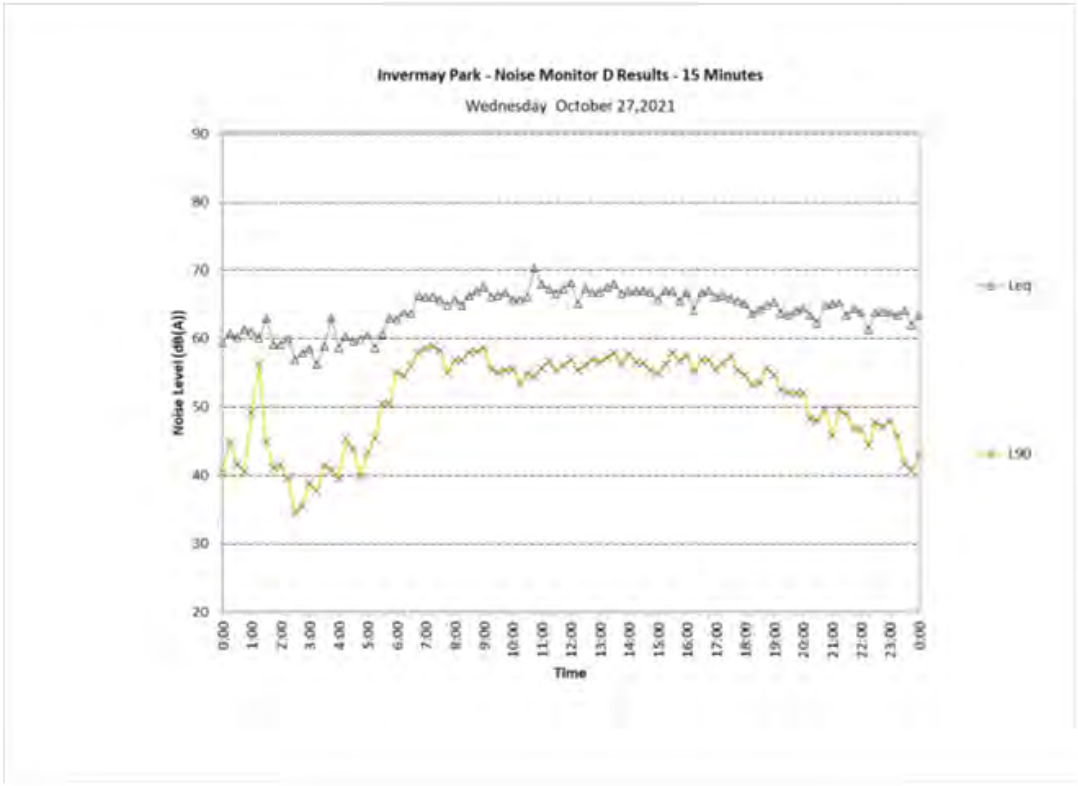
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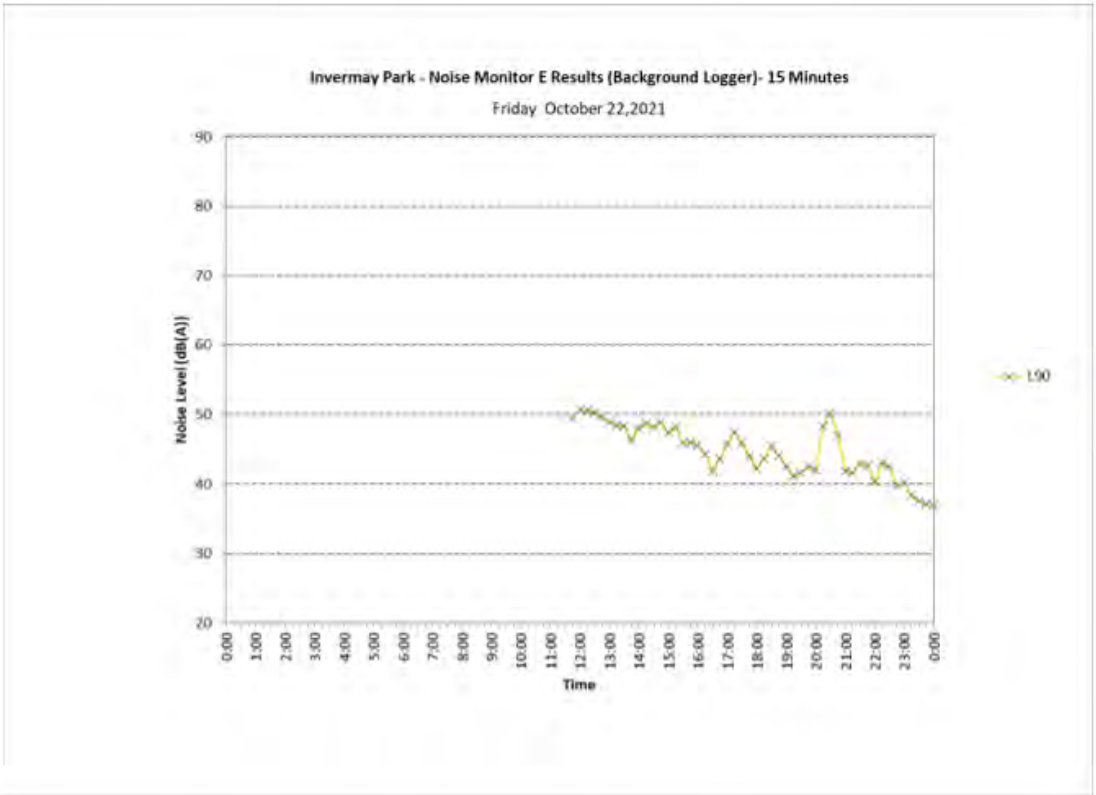
Wednesday October 27,2021
Noise Level (dB(A))
Time
Leq
L90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Time
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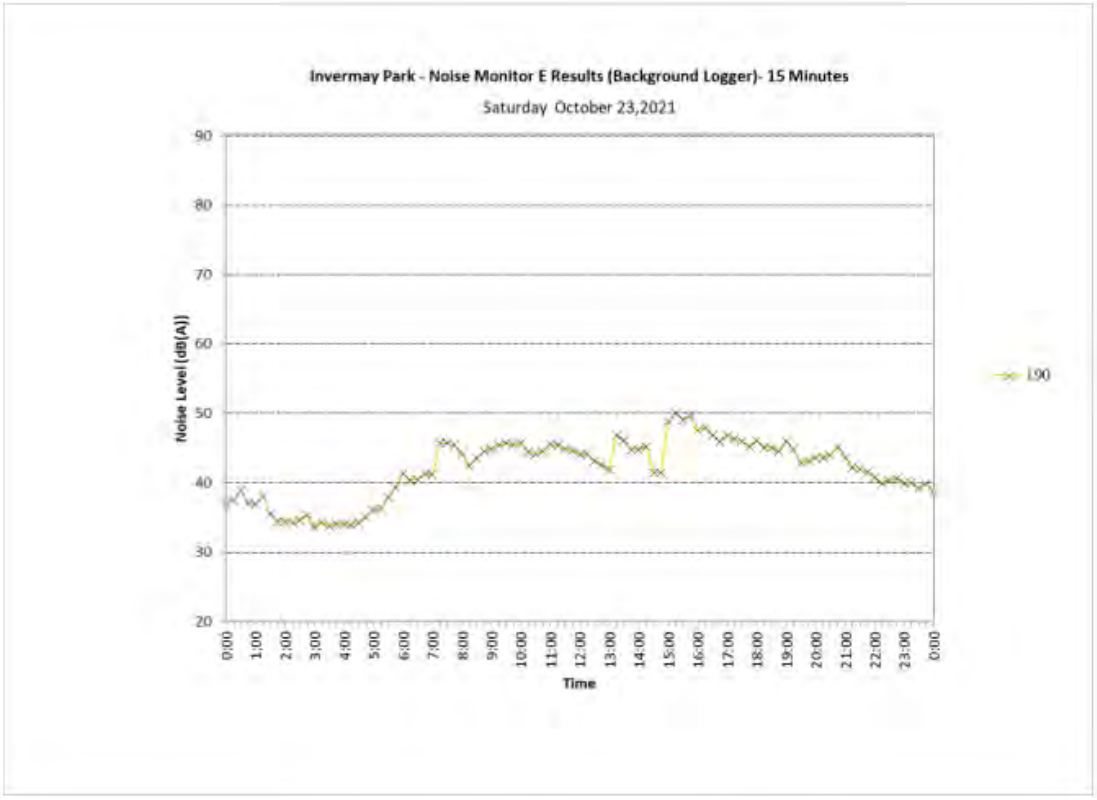
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Saturday October 23,2021
Noise Level (dB(A))
Time
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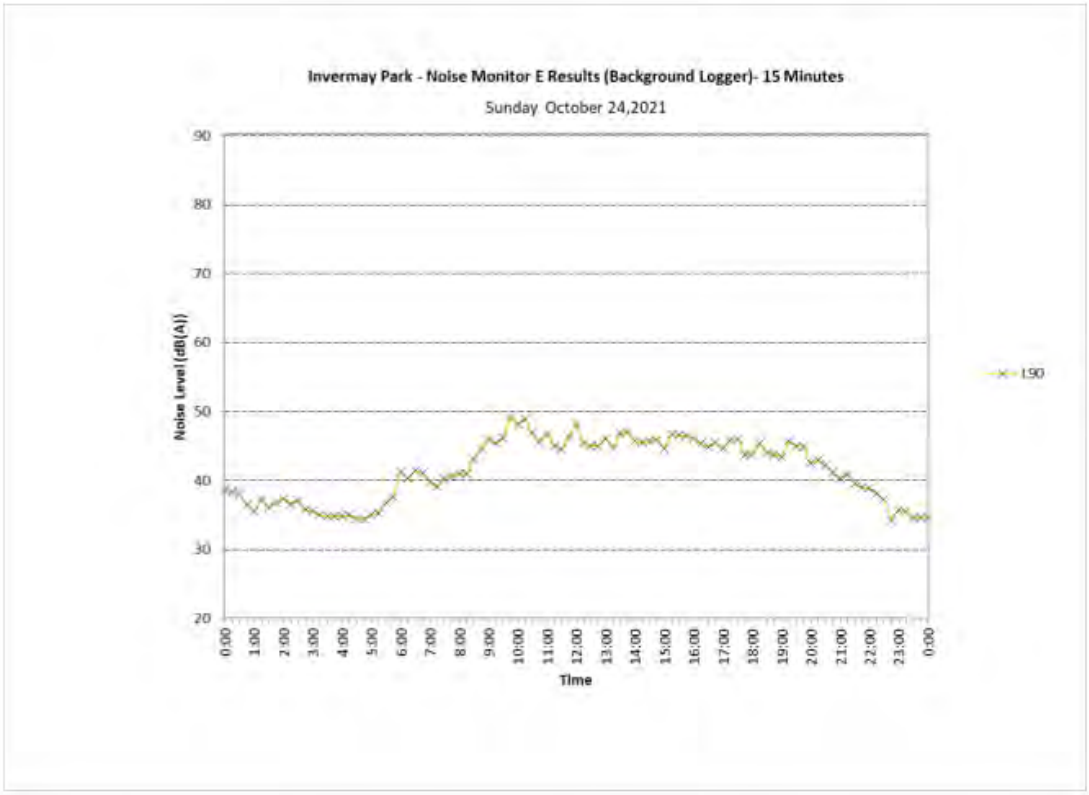
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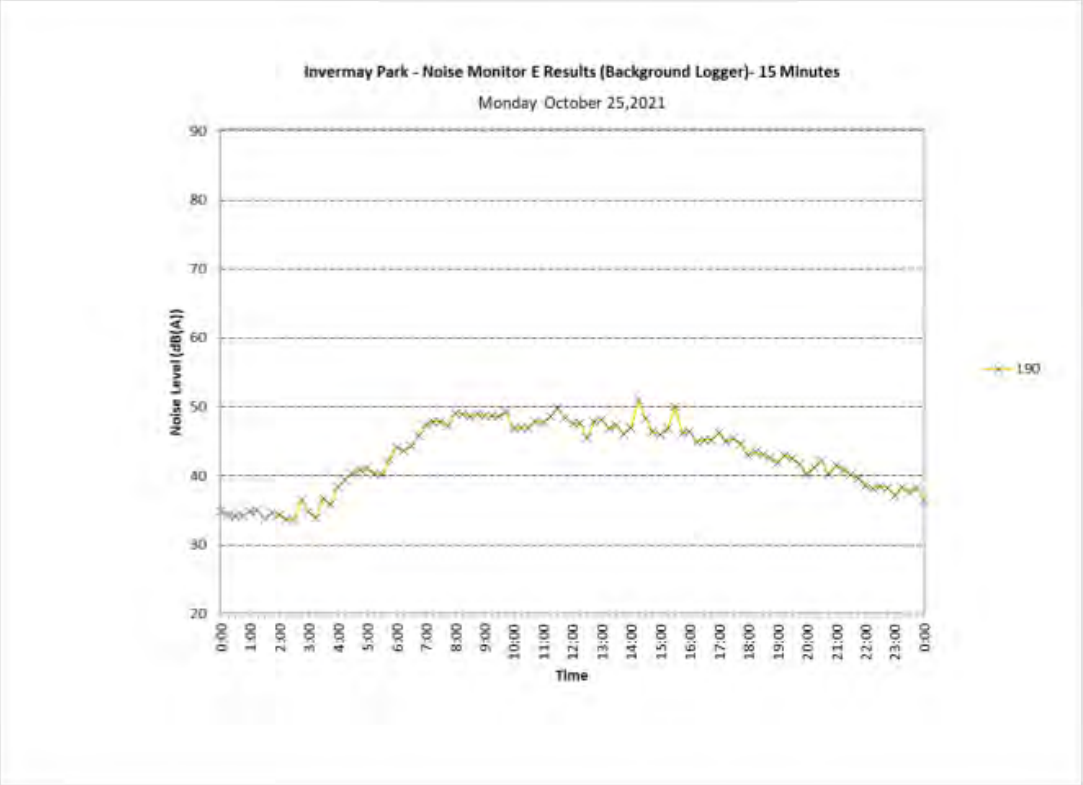
Sunday October 24,2021
Noise Level (dB(A))
Time
L90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Monday October 25,2021
Noise Level (dB(A))
Time
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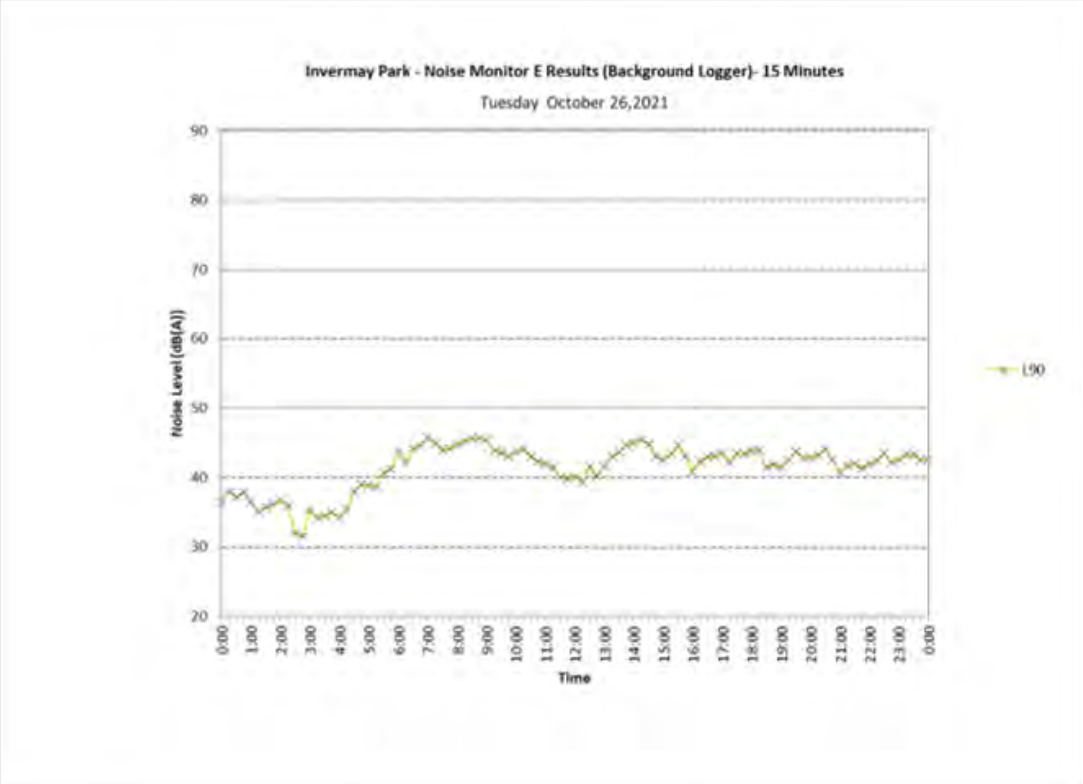
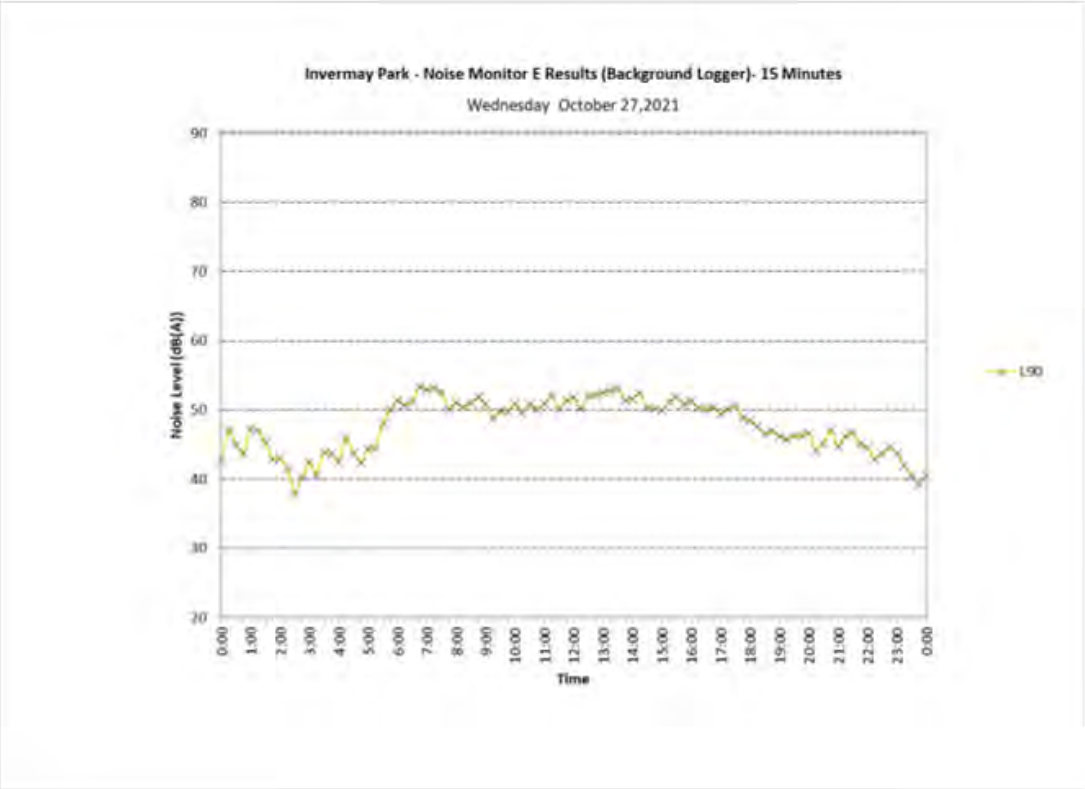

Invermay Park - Noise Monitor E Results (Background Logger)- 15 Minutes
Tuesday October 26,2021
Noise Level (dB(A))
Time
L90


Invermay Park - Noise Monitor E Results (Background Logger)- 15 Minutes
Wednesday October 27,2021
Noise Level (dB(A))
90
80
70
60
50
40
30
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1:00
2:00
3:00
4:00
5:00
6:00
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8:00
9:00
10:00
11:00
12:00
13:00
14:00
15:00
16:00
17:00
18:00
19:00
20:00
21:00
22:00
23:00
0:00
Time
L90

APPENDIX 3 – SUPPLEMENTARY INDUSTRIAL NOISE

To address MDA's comments with respect to the western industrial premises, AL conducted supplementary noise level measurements at the location indicated below. Three noise monitors were installed and supplemented by attended noise level measurements. The un-attended noise monitors were installed between 22 and 28 October 2021 and the attended noise level measurements were conducted on 22 October 2021 between 12pm and 3pm and on 28 October 2021 between 6:30am and 8am. Based on the early morning inspection on 28 October 2021, we confirm that there were no industrial activities between 6:30am and 7am on 28 October 2021.

The measurement equipment is detailed in Appendix 2 above.

Figure 7 – Noise monitor locations to measure western industrial premises

Table 5 – Measured Noise Levels

Location	Typical Highest Measured Noise Levels for Day Period dB(A) $L_{eq,30mins}$ [1]	Attended Noise Level Measurements for Industrial Activities dB(A) L_{eq} [1]
Monitor Location A	55 dB(A) $L_{eq,30mins}$ - Measured noise levels are governed by traffic noise from Western Freeway.	Griding noise: 52 dB(A) – occurs sporadically Forklift: inaudible Compressed air: 49 dB(A) - occurs sporadically Screwing: 44 dB(A) - occurs sporadically
Monitor Location B	55 dB(A) $L_{eq,30mins}$ - Measured noise levels are governed by traffic noise from Western Freeway	Low level hum: 48 dB(A) Forklift: inaudible Dust extraction unit: 61 dB(A) – operates for 5 seconds every 10-15 minutes
Monitor Location C	57 dB(A) $L_{eq,30mins}$ – Measured noise levels are governed by traffic noise from Western Freeway	Compressed air: 51 dB(A) – occurs sporadically Metal griding (inside the shed): 51 dB(A) - occurs sporadically Pipe cutting: 57 dB(A) - occurs sporadically Truck driving inside warehouse: 50 dB(A)

Note 1: Based on long-term noise monitoring data. We note that the L_{eq} presented is governed by continuous traffic noise from the Western Freeway. Noise from industrial noise during the 30-minute period in isolation is significantly lower than the presented L_{eq} levels.
Note 2: Measured noise levels are short term and affected by traffic noise levels in the background.

We confirm based on inspection on site and noise monitor audio playback that no industrial noise was audible during the evening and night period.

In addition, based on the attended noise level measurements noted in Table 5 above, refer the following noise prediction.

Table 6 – Industrial Noise Level Prediction

Measurement Location	Nearest Affected Lot	Dominant Industrial Noise at Measurement Location	Predicted Noise Levels Nearest Affected Lot $L_{eq,30mins}$	Day Period Criteria dB(A) $L_{eq,30mins}$	Complies
Location A	Lot 221	Griding noise: 52 dB(A) L_{eq} – occurs sporadically	50[1]	57	Yes
	Lot 222	Griding noise: 52 dB(A) L_{eq} – occurs sporadically	45[1]	57	Yes
Location B	Lot 323	Dust extraction unit: 61 dB(A) – operates for 5 seconds every 10-15 minutes	42	57	Yes
Location C	Lot 415	Compressed air: 51 dB(A) – occurs sporadically	45[1]	57	Yes
		Metal griding (inside the shed): 51 dB(A) - occurs sporadically	46[1]	57	Yes
		Pipe cutting: 57 dB(A) - occurs sporadically	51[1]	57	Yes

Note 1: Assuming the activity is operating continuously which is considered as a conservative assessment.

Based on the above we confirm that the operation from the western industrial noise precinct complies with the established EPA Noise Protocol Part 1 Criteria for the day-time period.

EPA Reference: 5011601

31 March 2021

[redacted]
Coordinator Statutory Planning
City of Ballarat
PO Box 655
BALLARAT VIC 3353

Dear Michelle,

RE: PLANNING PERMIT APPLICATION: PLP/2019/546
PROPOSAL: RE-REFERRAL RESPONSE TO EPA'S CONCERN FOLLOWING COUNCIL RFI
ADDRESS: LOT 1 HEINZ LANE INVERMAY PARK 3350

Thank you for your correspondence supplied in relation to the above planning permit application, referred to Environment Protection Authority (EPA) on 22 March 2021.

EPA understands that the proposal is for a 78 lot subdivision to be developed in two stages (B1 and B2). The layout of subdivision remains unchanged. EPA is not a statutory referral authority under Section 55 of the *Planning and Environment Act 1987*, since this proposal:

a) does not require a licence or works approval or amendment to a licence or works approval;
b) is not proposed to be used for an industry, utility installation or warehouse for a purpose listed in the table to Clause 53.10 shown with a threshold distance not specified or for which the threshold distance cannot be met; and
c) is not a proposed extractive industry intended to be used at a later date for landfill.

A meeting with EPA, Council, applicant and associated consultants was held on 23 February 2021 to discuss the concerns raised in our previous referral response (Reference 5011327). During the discussion, it was raised by EPA that the reports should better represent best practice.

Environment Protection Authority Victoria
West 1 Federal Mills 33 Mackey St, North Geelong VIC 3215 DX216073
1300 372 842 (1300 EPA VIC) www.epa.vic.gov.au

The following documents were provided directly to EPA by the applicant on 5 March 2021 in response to the meeting discussion.

- 'Response to EPA Review (20180001.3/0503A/R1/BAW)', prepared by Acoustic Logic dated 25/02/2021
- 'Additional Information for EPA Victoria – Air Quality Impacts', prepared by Graeme Ross & Associates Pty Ltd dated 28/02/2021.

EPA acknowledges the clarifications provided in the documents relating to the noise and vibration concerns. However, following a technical review, some limitations remain in these reports for Council's consideration. The following headings and points have been used to be consistent with the response to the Acoustic Logic document referenced above.

General comments

3. Sound Plan modelling.

It is understood that an 'adjustment' had to be made to correlate the noise model to the measurement at Location 1. The value of this adjustment has not been detailed and was the adjustment within an acceptable range for this kind of correlation?

4. EPA's concern in point 4 of our previous response was '*The uncertainty of the modelling and the associated risk in regard to the conclusions of the report are not documented.*'. The most recent response provided does not appear to address this concern.

5. We have concerns with the approach taken in that:

- there is a risk that the levels of AS/NZS 2107 exceed in places, since the assessment considered the higher values for the range of that standard for a single source only (road traffic noise). As a result, there is no allowance for the contributions from other sources (rail and industry noise) that could, in places, be significant.
  This risk doesn't appear to be addressed. We note that AS/NZS 2107:2016 specifies in a note in clause 4.4 that '*Sound levels within the given ranges have been found to be acceptable by most people for the space under consideration. When the sound level is greater than the upper level of the range most people occupying the space will become dissatisfied with the level of sound.*'
  We also note that the conversion made from noise indicator L10 obtained from CRTN calculations to indicator LAeq for assessment against the levels of AS/NZS 2107 (including the underlying assumptions and associated uncertainty) has not been reported or discussed.

- Notwithstanding the above, we note that:

EPA VICTORIA

- Council should consider whether the upper value of the Design Sound Levels of AS/NZS 2107:2016 is an adequate criterion giving regard to the standard where it reads (clause 5.2 Design sound levels and expectations of quality) where it reads: '*The design sound levels given in Table 1 are not necessarily appropriate in all circumstances. In particular, lower sound levels may be appropriate in quiet environments or where expectations of quality are high. For example, lower design sound levels than those given in Table 1 may be preferred for luxury hotels and apartments. However, additional costs will be incurred in achieving sufficient sound attenuation between spaces for acoustic privacy requirements. For each 5 dB reduction in the background sound level, 5 dB shall be added to the overall sound isolation performance of the dividing elements to maintain the same level of privacy. There could also be additional costs associated with the provision of quieter building services.*'

- an assessment based on internal noise levels:

  - does not consider the protection of outdoor amenity; and
  - warrants the provision of alternative ventilation since internal amenity requires windows and doors to be closed.

Road traffic noise

11. We note that a revised assessment is proposed, considering an earth berm and compliance to the VicRoads Policy criterion of 63 dB LA10(18 hours) is predicted with a margin of 2-3 dB for the most exposed lots. This generally understood to be good practice. The comments on Points 3 and 4 relating to the 'adjustment' remains.

Rail noise

16. Acoustic Logic reports that the noise source for train noise has been modelled as a 'moving point source'. We are concerned that they do not refer to using a recognised rail noise model.

Typically, train noise models consider a finite line source, or a combination of point sources (each representing a contribution associated with a track segment). In contrast, using a single point source to model train noise would underpredict community noise levels because it would overestimate attenuation of sound due to geometrical spreading with distance.

Methodology for Industry noise

21. The proposed development is located within the Ballarat Major Urban area (refer https://www.epa.vic.gov.au/about-epa/laws/new-laws/summary-of-regulations/summary-of-noise-regulations/new-noise-boundaries-for-major-urban-areas). NIRV specifies (EPA publication 1411, section 3.1) that

'In major urban areas, the recommended levels are determined following procedures in SEPP N-1.'

Zoning levels

25. We note the clarifications provided for the individual lots 405, 213 and 201. These lots were mentioned in our previous response as examples to illustrate how the zoning levels can vary across the proposed development.

This discussion for a few individual instances should be further developed to consider the comparative values of the SEPP N-1 limits and the industry noise levels across the whole of the proposed development.

Conclusion

The revised reports seek to address the concerns highlighted in EPA's previous response as well as demonstrating best practice such as proposing an earth berm as a mitigation measure.

Unfortunately there are still some parts of the report that need further assessment/ addressing in the case of the model and the associated risk of noise impacts (Point 3 and 4), concerns with the approach taken to model rail noise using a point source (Point 16), and the cumulative noise impacts of road, rail and industry noise. (Point 5).

EPA's expectation is that the conclusions made by Acoustic Logic are supported by a risk assessment that gives regard to the cumulative impacts and the residual noise, once all reasonable and practicable measures to address noise and its impacts have been considered. EPA recommends Council understand the potential impacts on the proposed subdivision prior to determining the application.

If you need additional information or assistance, please contact our Senior Planning Officer, Chris Chiu, on 1300 EPA VIC (1300 372 842).

Yours sincerely

[redacted]

[redacted]
Planning Team Lead (Western Region)
Major Projects and Planning
EPA Victoria

Department of Transport

GPO Box 2392
Melbourne, VIC 3001 Australia
Telephone: +61 3 9651 9999
www.transport.vic.gov.au
DX 201292

[redacted]
Ballarat City Council
25 Armstrong Street South
Ballarat VIC 3353

Dear Stephanie

PLANNING APPLICATION NO.:	**PLP/2019/546**
DEPARTMENT REFERENCE NO:	**PPR 31028/19**
PROPERTY ADDRESS:	**0 HEINZ LANE, INVERMAY PARK VIC 3350**

Thank you for your correspondence referring details of the above application to the Department of Transport (Head, Transport for Victoria) pursuant to Section 55 of the Planning and Environment Act 1987.

The application is for:

Staged Multi (111) Lot Subdivision adjacent RDZ1.

The Head, Transport for Victoria has considered the application and in principle has no objection to the proposal, but would require that the following conditions be included in any Notice of Decision to issue a Planning Permit or Planning Permit:

a) Prior to the occupation of the development the following works on Western Freeway road reserve must be completed at no cost to and to the satisfaction of the Head, Transport for Victoria:

   i. An acoustic earth mounding. Design details must be provided to the Head, Transport for Victoria for approval prior to the commencement of these works.

Note: Separate consent for works within the road reserve and the specifications of these works is required under the *Road Management Act 2004*. For the purposes of this application the works will include provision of:

   a. An acoustic earth mounding

Please forward a copy of the Planning Permit, Notice of Decision to Grant or Refusal to Grant a Planning Permit, as required under Section 66 of the Planning and Environment Act 1987, to the Head, Transport for Victoria at western.mail@roads.vic.gov.au

Should you have any enquiries regarding this matter, please contact western.mail@roads.vic.gov.au

Yours sincerely

[redacted]
for

[redacted]
MANAGER DEVELOPMENT
WESTERN REGION
88 Learmonth Rd
Wendouree Vic 3355
Under delegation from the Head, Transport for Victoria
25 November 2020
Cc Applicant

VICTORIA State Government

Ref: **15000-63165-118005**
Council Ref: **PLP/2019/546**

22 March 2022

Town Planner
City Of Ballarat
P O Box 655
BALLARAT VIC 3350

Dear Town Planner,

CONDITIONAL CONSENT TO GRANT A PERMIT
CERTIFICATION AND COMPLIANCE REQUIRED

Application No: PLP/2019/546
Applicant: Cardno TGM
Site Name: Staged Multi Lot Subdivision
Address: Heinz Lane Invermay Park

FRV, acting as a Referral Authority pursuant to Section 55 of the Planning and Environment Act does not object to the grant of a permit to Cardno TGM for the subdivision at Heinz Lane Invermay Park subject to the following conditions being attached to any permit which may be issued and a copy of the permit being forwarded to FRV.

Note certification and statement of compliance are not agreed.

– Start of Conditions –

1. Hydrants

Prior to the issue of a Statement of Compliance under the *Subdivision Act 1988* the following requirements must be met to the satisfaction of the FRV:

1.1 Above or below ground operable hydrants must be provided. The maximum distance between these hydrants and the rear of all building envelopes (or in the absence of building envelopes, the rear of the lots) must be 120 metres and the hydrants must be no more than 200 metres apart. These distances must be measured around lot boundaries.

1.2 The hydrants must be identified with marker posts, road reflectors and white painted triangles as applicable to the satisfaction of Fire Rescue Victoria.

Fire Rescue Victoria
ABN 28 598 558 561
456 Albert Street
East Melbourne
Victoria Australia 3002
T 1300 367 617
F +61 3 9665 4522
frv.vic.gov.au

2. Roads

Roads must be constructed to a standard so that they are accessible in all weather conditions and capable of accommodating a vehicle of 15 tonnes for the trafficable road width.

2.1 The average grade must be no more than 1 in 7 (14.4%) (8.1 degrees) with a maximum of no more than 1 in 5 (20%) (11.3 degrees) for no more than 50 meters. Dips must have no more than a 1 in 8 (12%) (7.1 degree) entry and exit angle.

2.2 Curves must have a minimum inner radius of 10 metres.

2.3 Have a minimum trafficable width of 3.5 metres and be clear of encroachments for at least 0.5 metres on each side and 4 metres above the access way.

2.4 Roads more than 60m in length from the nearest intersection must have a turning circle with a minimum radius of 8m (including roll-over kerbs if they are provided) T or Y heads of dimensions specified by FRV may be used as alternatives.

– End of Conditions –

Additional Comments

FRV does not consent to the Certification of the Plan of Subdivision and Statement of Compliance for Subdivision at this stage.

If you wish to discuss this matter, please do not hesitate to contact [redacted], Fire Safety Coordinator, on [redacted].

Yours sincerely

[redacted]

[redacted]
Fire Safety Coordinator

Our Reference: 307290595
Your Reference: PLP/2019/546

12 September 2019

City of Ballarat
Subdivisions Officer
PO BOX 655
BALLARAT VIC 3353

Dear Sir/Madam

CONDITIONAL CONSENT TO ISSUE OF PLANNING PERMIT
APPLICATION NO: PLP/2019/546
LOT 1 HEINZ LANE, INVERMAY PARK

Subject to the following conditions, Powercor Australia Ltd (the Distributor) does not object to the issue of a planning permit for the abovementioned application

Conditions Required By the Distributor

1. This letter shall be supplied to the applicant in its entirety.

2. The plan of subdivision submitted for certification under the Subdivision Act 1988 shall be referred to the Distributor in accordance with Section 8 of that Act.

3. The applicant shall provide an electricity supply to all lots in the subdivision in accordance with the Distributor's requirements and standards.
Notes: Extension, augmentation or rearrangement of the Distributor's electrical assets may be required to make such supplies available, with the cost of such works generally borne by the applicant.

4. The applicant shall ensure that existing and proposed buildings and electrical installations on the subject land are compliant with the Victorian Service and Installation Rules (VSIR).
Notes: Where electrical works are required to achieve VSIR compliance, a registered electrical contractor must be engaged to undertake such works.

5. The applicant shall, when required by the Distributor, set aside areas with the subdivision for the purposes of establishing a substation or substations.
Notes: Areas set aside for substations will be formalised to the Distributor's requirements under one of the following arrangements:
   - RESERVES established by the applicant in favour of the Distributor.
   - SUBSTATION LEASE at nominal rental for a period of 30 years with rights to extend the lease for a further 30 years.
     The Distributor will register such leases on title by way of a caveat prior to the registration of the plan of subdivision.

6. The applicant shall establish easements on the subdivision, for all existing Distributor electric lines where easements have not been otherwise provided on the land and for any new powerlines to service the lots or adjust the positioning existing easements.
   Notes:
   - Existing easements may need to be amended to meet the Distributor's requirements
   - Easements required by the Distributor shall be specified on the subdivision and show the Purpose, Origin and the In Favour of party as follows:

Easement Reference	Purpose	Width (Metres)	Origin	Land Benefited / In Favour Of
	Power Line		Section 88 - Electricity Industry Act 2000	Powercor Australia Ltd

***** END OF CONDITIONS *****

It is recommended that applications for electricity supply to each lot be submitted at the earliest opportunity so that the precise requirements of the Distributor can then be determined and accommodated. Applications for electricity supply shall be submitted via the Distributor's web portal, "mySuppy" which can be accessed via the following link:
https://customer.portal.powercor.com.au/mysupply/CIAWQuickCalculator

Queries about this subdivision may be directed to the Customer Requests Team on 1800 771 434 or crr@powercor.com.au

Yours faithfully,

[redacted]
[redacted]
Customer Requests Officer

Doc code: 19/8258 Sect 55 2019-10-17
Your ref: PLP2019546

CENTRAL HIGHLANDS WATER

17th October 2019

[redacted]
Statutory Planning
City of Ballarat
PO Box 655
BALLARAT VIC 3353

Dear [redacted]

Application for Planning Permit Staged Multi-Lot Subdivision, Lot 1 Heinz lane, Invermay Park.

We refer to your letter received 12th September 2019 and advise that in accordance with Section 56(1)(b) of the Planning and Environment Act, this Authority does not object to the granting of any permit that may issue subject to the following conditions: -

1. Any plan lodged for certification will be referred to the Central Highlands Region Water Corporation pursuant to Section 8(1)(a) of the Subdivision Act.

2. Reticulated sewerage facilities must be provided to each lot by the owner of the land (or applicant, in anticipation of becoming the owner) to the satisfaction of the Central Highlands Region Water Corporation. This will include the construction of works and the payment of major works contributions by the applicant.

3. A reticulated water supply must be provided to each lot by the owner of the land (or applicant, in anticipation of becoming the owner) to the satisfaction of the Central Highlands Region Water Corporation. This will include the construction of works and the payment of major works contributions by the applicant.

4. The owner will provide easements to the satisfaction of the Central Highlands Region Water Corporation, which will include easements for pipelines or ancillary purposes in favour of the Central Highlands Region Water Corporation, over all existing and proposed sewerage facilities within the proposal.

5. If required the owner will provide easements to the satisfaction of Central Highlands Region Water Corporation for pipeline or ancillary purposes through other land in the vicinity, as it is considered by the Authority that such easements may be required for the economical and efficient subdivision or servicing of or access to land covered by the subdivision.

6. The owner must demonstrate to the satisfaction of Central Highlands Region Water Corporation how the subdivision design incorporates the principles of water sensitive urban design (WSUD) and the integrated water management (IWM) requirements of the Ballarat City Integrated Water Management Plan to achieve the associated potable water reduction targets. Where this involves a requirement for future owners of the lots to install and maintain rainwater tanks the owner must enter into an agreement with Central Highlands Region Water Corporation (CHW) and City of Ballarat under Sections 173 and 174 of the *Planning and Environment Act 1987* to record this requirement, unless an alternative means of recording the requirement is agreed to Central Highlands Water's satisfaction.

Central Highlands Region Water Corporation
7 Learmonth Rd Wendouree VIC 3355 PO Box 152 Ballarat VIC 3353
T: 1800 061 514 **F:** 03 5320 3299 **E:** customerenquiries@chw.net.au **ABN:** 75 224 340 348
chw.net.au

7. If the land is developed in stages, the above conditions will apply to any subsequent stage of the subdivision.

Yours faithfully,

[redacted]

[redacted]
Senior Officer Planning

Central Highlands Region Water Corporation
7 Learmonth Rd Wendouree VIC 3355 PO Box 152 Ballarat VIC 3353
T: 1800 061 514 **F:** 03 5320 3299 **E:** customerenquiries@chw.net.au **ABN:** 75 224 340 348
chw.net.au

Wathaurung Aboriginal Corporation
ICN 3330
trading as Wadawurrung
ABN 11 312 302 330

99 Mair Street East
BALLARAT VIC 3350

P 03 4308 0420
F 03 4308 0421
www.wathcorp.com.au

23rd November 2018

Aboriginal Heritage Act 2006
Section 63

Cultural Heritage Management Plan – Notice of Approval

The Wathaurung Aboriginal Corporation trading as Wadawurrung, acting as the Registered Aboriginal Party hereby approve the cultural heritage management plan referred to below:

'Proposed residential Development at Lot 1 Bogong Avenue, Invermay Park'

Cultural Heritage Management Plan number: 15765

Sponsor: Villawood MGC Pty Ltd

Heritage Advisor: [redacted]

Authors: [redacted]

Cover Date: 12th November 2018

Pages: Cover Page, i-viii, 1- 119

Received for Approval: 26th October 2018

Pursuant to s.64(1) of the Act this cultural heritage management plan takes effect upon the granting of this approval and once a copy is lodged with the Secretary of DPCD. *

[redacted]
RAP Consultant

[redacted]
General Manager

Wathaurung Aboriginal Corporation
trading as: Wadawurrung

*This notice of approval should be inserted after the title page and bound with the body of the management plan.

7. GENERAL BUSINESS - MATTERS ARISING FROM THE AGENDA

8. CLOSE