THE CITY OF
GREATER GEELONG

STRATEGIC IMPLEMENTATION PANEL SUBMISSION

CITY OF GREATER
GEELONG

GREATER GEELONG PLANNING SCHEME

AMENDMENT C444ggee - Southeast Lara Residential Growth Area

AMENDMENT C453ggee - Lara Industrial Business Park

PART B Submission to the Independent Panel

Panel:	**Michael Ballock (Chair)**
	Kate Partenio
Date:	**13 April 2026**
Prepared by:	**Peter Schembri, Senior Strategic Planner**
	on behalf of the City of Greater Geelong

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INTRODUCTION

1. This submission is made by the City of Greater Geelong (**Council**).

2. Council is the Planning Authority for Amendment C444ggee (**C444ggee**) and Amendment C453ggee (**C453ggee**) (or the **Amendments**) to the Greater Geelong Planning Scheme. The Amendments have been prepared by Council at the request of Lara Farms Pty Ltd (**Lara Farms**), the proponent and majority landowner in the area affected by the Amendments.

3. C444ggee applies to the land at 76-156 Canterbury Road East, 785-805 Princes Highway and 705-765 Princes Highway, Lara VIC 3212.

4. C453ggee applies to the land at 76-156 Canterbury Road East, 785-805 Princes Highway, 705-765 Princes Highway and 610 Rennie Street, Lara VIC 3212.

5. The purpose of the Amendments are to:

   5.1. C444ggee: rezone the land from the Farming Zone to General Residential Zone Schedule 1, apply the Development Plan Overlay Schedule 48 (**DPO48**) to the land, and apply an Environmental Audit Overlay (**EAO**) to part of the land.

   5.2. C453ggee: rezone the land from the Farming Zone to Industrial 1 Zone and Industrial 3 Zone and apply the Design and Development Overlay Schedule 55 (**DDO55**) to the land.

6. Together, these changes seek to facilitate residential (South East Lara Residential Growth Area) and industrial (Lara Business Park) growth and development in accordance with Council's strategic plans.

7. Prior to this Hearing, in accordance with the Panel's directions of 3 March 2026 (Panel Directions), Council circulated:

   7.1. on 30 March 2026, the 'Part A' submission which is adopted for this Panel Hearing. It is taken to be read and as forming part of these submissions. The Part A submission detailed the history preceding the Amendments, explained the context within which they were prepared and the chronology of events; and

   7.2. on 13 April 2026, together with this Part B submission, its 'Day 1' version of the Amendment documentation (provided in **Attachment A**).

PANEL DIRECTIONS

9. This Part B submission responds to direction #11 of the Panel's Directions which requires Council to address the following:

    9.1. access to the site including the railway crossing

    9.2. the flood impact assessment

    9.3. its response to the issues raised in submissions

    9.4. its response to submissions and evidence

    9.5. its final position on the Amendments.

10. In accordance with direction #11 of the Panel Directions, on Monday 13 April 2026 Council will be circulating its Part B submission and its 'Day 1' version of the Amendments documentation. The Part B submission will address, as appropriate, the remaining directions of the Panel.

SUMMARY OF COUNCIL'S PART B SUBMISSION

11. The Delegates Report of 28 January 2026 provides a summary of the issues raised in the submissions, together with Council's response to these issues.

12. Council's Part A submission provides a summary of the key issues raised with the Amendments.

13. This Part B submission provides Council's detailed response to key issues raised in the directions and submissions and responds to the evidence of Lara Farms circulated prior to the Hearing.

ACCESS TO THE SITE INCLUDING THE RAILWAY CROSSING

14. This section of Council's submission draws from several information sources, the Amendments reports and the recently completed combined C444ggee and C453ggee Transport Impact Assessment, prepared by Traffix Group dated March 2026 (**TIA**).

15. Access arrangements are addressed under existing conditions and developed conditions.

Existing conditions

16. The Amendments land is bound by the train line to the west, Rennie Street to the east, Canterbury Road East to the north and the Princes Freeway to the south.

17. The TIA Section 3.4.2 analyses traffic conditions at nearby locations, finding (p. 31):

> Each of the key roads which would facilitate vehicle access to the subject land are currently within their environmental capacities, except the section of Canterbury Road East, east of the railway line, which under current conditions slightly exceed its characteristic volume.

18. Then at Section 3.4.3, the TIA assessed relevant nearby intersections, finding (p. 35):

> All intersections operate under Level of Service A ('Excellent') with minimal delays and queues, except for the Forest Road South/Canterbury Road East/ Canterbury Road West roundabout, which operates at a LoS B with a DOS of 0.66 during the school peak hour. This intersection is still considered to operate at a 'Very Good' level of service.

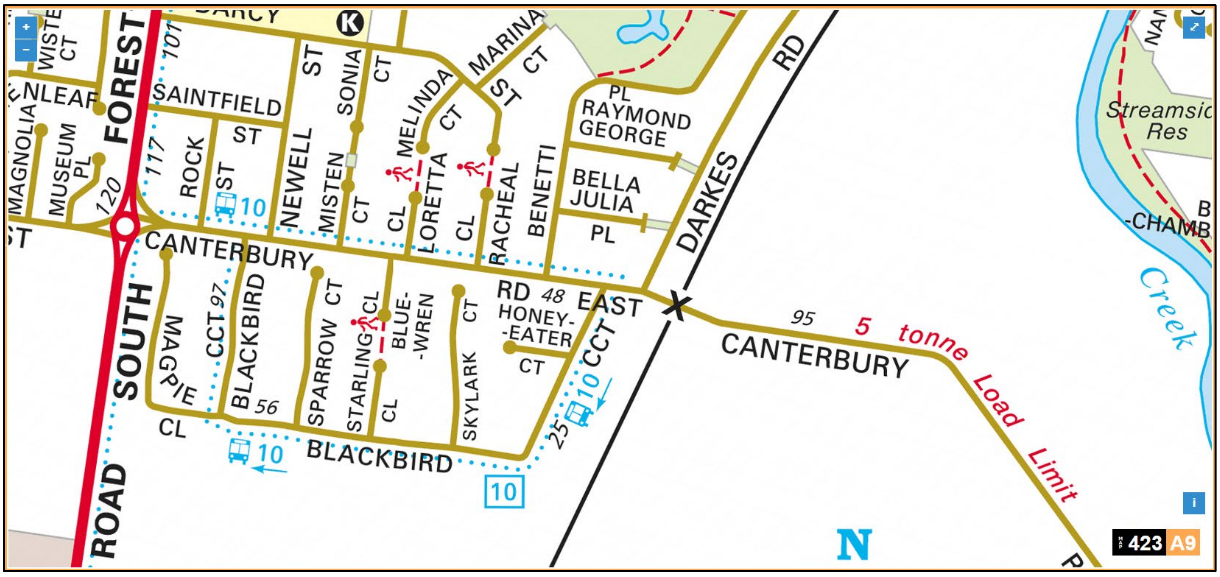
19. There are three ways for vehicles to access:

    19.1. **From Canterbury Road East heading east** across the railway level crossing. Canterbury Road East is subject to a heavy vehicle restriction (5 tonne load limit). The road on either side of the railway line is described as follows:

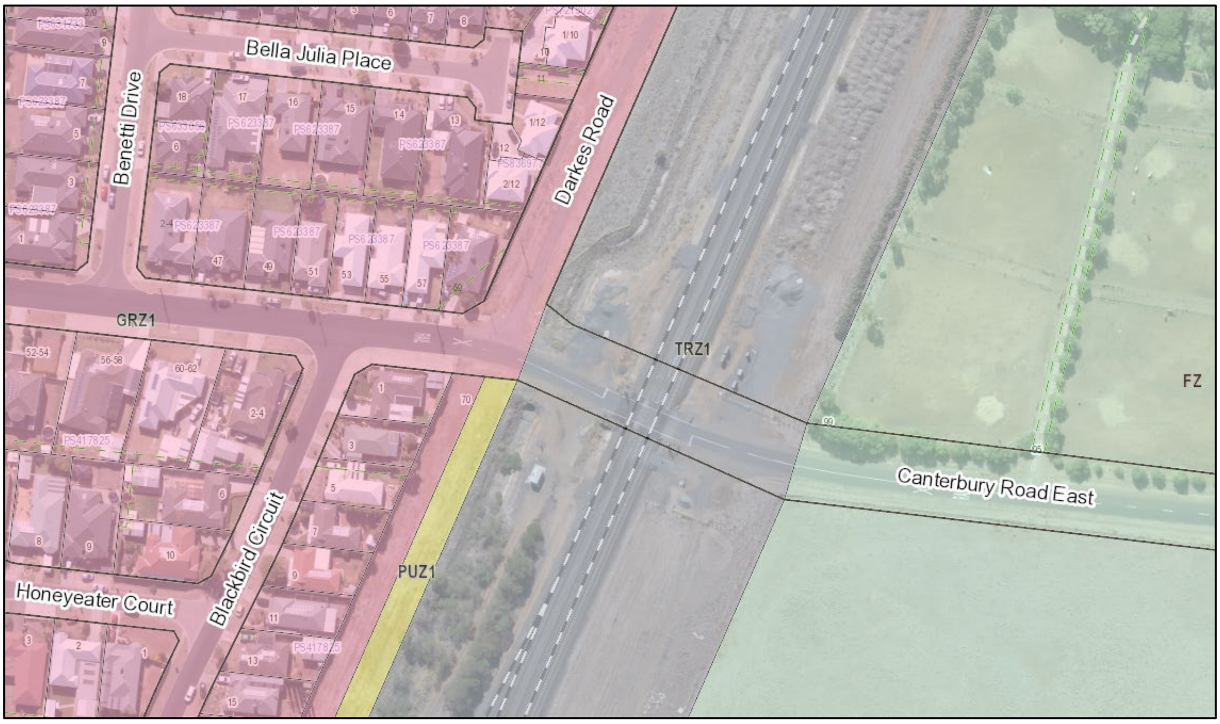
Road Name	Classification[1]	Configuration	Speed Limit	On-Street Parking
Canterbury Road East (east of the rail line)	Council managed 'Category 2 – Local Access – Urban' road	It has a 6.5m wide pavement width in this location, which facilitates a lane for traffic in each direction. Shoulders, on-street car parking and footpaths are not provided within this section of Canterbury Road East.	Posted speed limit of 80km/h	On-street parking is not provided along this section of the road.
Canterbury Road East (west of the rail line)	Council managed 'Category 3 – Secondary Distributor' road	It is aligned in an east-west direction between the rail line in the east and Forest Road South in the west. Canterbury Road East has a 9.7m wide pavement width in this location, which facilitates a lane for traffic in each direction and kerbside car parking on both sides. A footpath is provided on at least one side of Canterbury Road East between the rail line and Forest Road South.	Posted speed limit of 60km/h	Unrestricted on-street car spaces is generally provided on both sides.

Source: TIA Table 2

Access images and maps are shown below.



Source: Melways online



Source: Places Weave

Source: Nearmap (above and below)

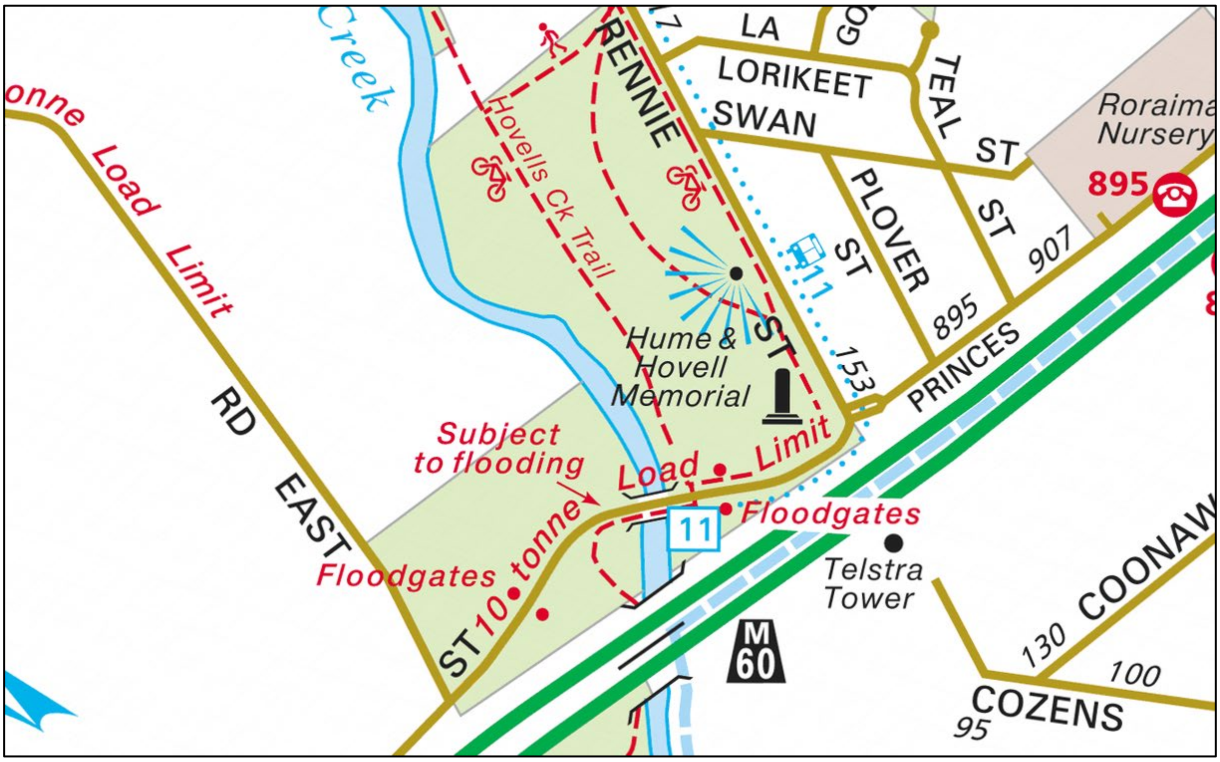
19.2. **From Rennie Street heading south west** over Hovells Creek arriving at the Rennie Street/ Canterbury Road East 'T' intersection. Rennie Street is subject to a heavy vehicle restriction (10 tonne load limit). The street on either side of the Hume & Hovell Memorial is described as follows:

Road Name	Classification[1]	Configuration	Speed Limit	On-Street Parking
Rennie Street (south-west of the Hume and Hovell Memorial Monument)	Council managed 'Category 3 – Collector Road Rural'	Rennie Street in this area generally has a 6.0-6.5m wide pavement width, which facilitates a lane for traffic in each direction. Shoulders, on-street car parking and footpaths are not provided within this section of Rennie Street.	A speed limit of 60km/h applies to this section of Rennie Street, increasing to 100km/h further south.	On-street parking is not provided along this section of the road.

Rennie Street (north of the Hume and Hovell Memorial Monument)	Council managed 'Category 3 – Secondary Distributor' road	Rennie Street has a 10.4m wide pavement width in this location, which facilitates a lane for traffic in each direction and kerbside car parking on both sides. A footpath is provided on one side of Rennie Street.	A speed limit of 60km/h applies to Rennie Street in this location.	Unrestricted on-street car spaces is generally provided on both sides.

Access images and maps are shown below.

Attachment B provides a description and engineering assessment of the Rennie Street structure crossing Hovells Creek. **Attachment C** provides an extract of Council's 2020 Shared Trails Masterplan identifying a 'trail gap' to connect the Hovells Creek Trail to Forest Road using Rennie Street and Canterbury Road East.



Source: Melways online

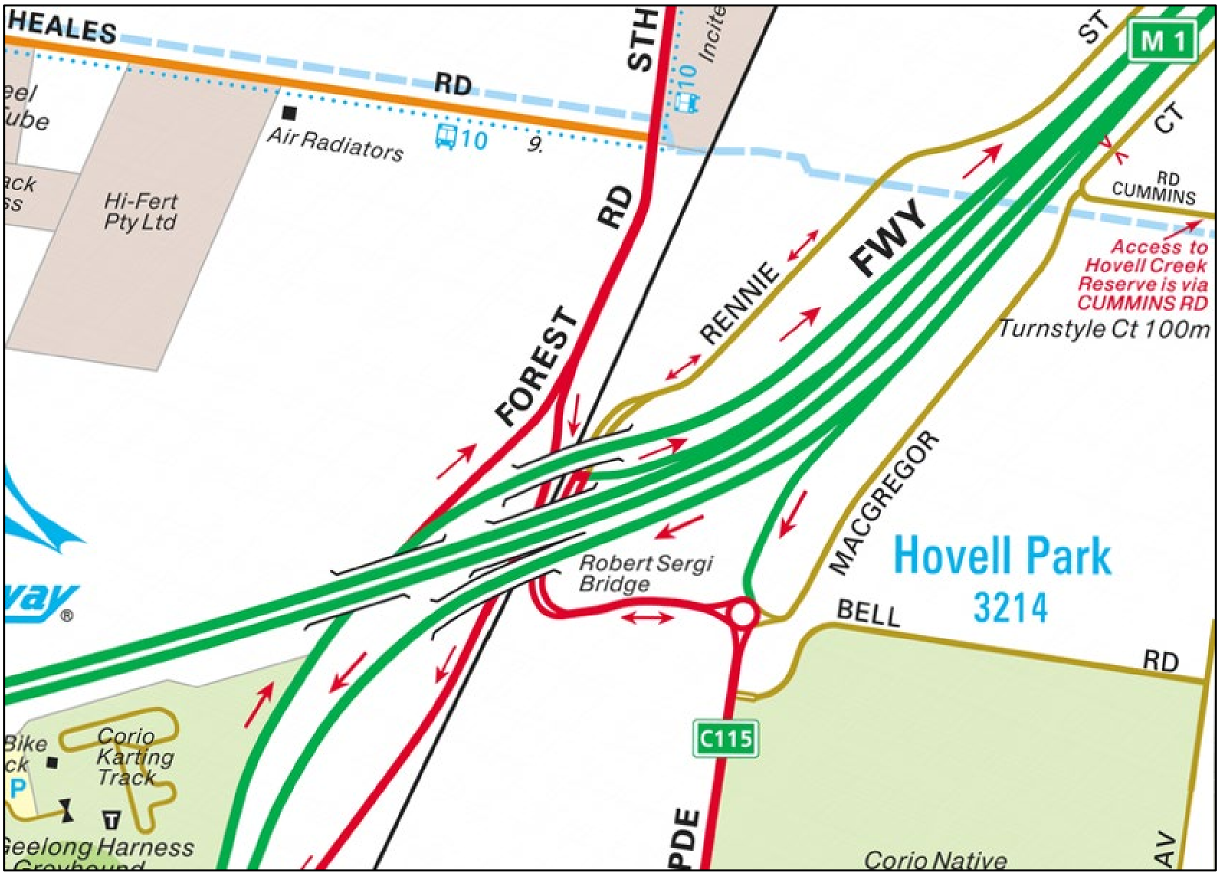
Source: Google Maps

Source: Nearmap

Source: Nearmap

Source: Nearmap

19.3. **From Shell Parade heading west** from the roundabout, then north under the Robert Sergi Bridge (Princes Freeway) which becomes Rennie Street. Rennie Street (south-west of the Hume & Hovell Memorial) is summarised in paragraph 16.2. Access images and maps are shown below.



Source: Melways online

Source: Places Weave (above) Source: Nearmap (below)

Source: Nearmap (all above)

20. No formal pedestrian or bicycle infrastructure is available to access the Amendments land.

Developed conditions

21. The TIA concludes that several access upgrades will be required in order for the developments to provide acceptable vehicle, pedestrian and bicycle access. The findings are to:

    21.1. Upgrade the existing Canterbury Road East level crossing to include an active gated control to facilitate safe pedestrian and dismounted cyclist movements across the rail line (on the south side of the development). The level crossing is further discussed in the section below.

    21.2. Provide a short channelised right turn lane and a basic left turn treatment to be provided on Rennie Street at the Canterbury Road East/ Rennie Street Intersection.

    21.3. Upgrade Canterbury Road East to a connector style road, consistent with the balance of Canterbury Road East to the west of the rail line.

    21.4. Upgrade Rennie Street along the Amendments land frontage, including providing kerb and channel, footpaths and verge landscaping.

    21.5. Provide shared paths:

        21.5.1. along Canterbury Road East and Rennie Street.

        21.5.2. along the edge of the rail line, the landscape interface and the retarding basin, adjacent to the southern boundary of the site.

        21.5.3. to the Hovells Creek Trail.

22. The Delegate's Report highlights a gap in the footpath network on the south side of Canterbury Road East, west of the railway line. The shared path will need to be extended by approximately 94 metres from the C444ggee development to Blackbird Circuit.

23. Provision of a shared path from the C444ggee land to connect to the Hovells Creek Trail is discussed on page 85 of the TIA:

> To the north of Canterbury Road, a footpath or shared path will need to be provided on Rennie Street in order to connect the footpaths provided along Canterbury Road East to the existing shared paths along Hovells Creek and through Hovells Creek Reserve (also discussed at Section 4.16). This could take the form of a kerbside shared path on the north or south side of Rennie Street, or via an off-road shared path through the Public Park and Recreation Zone on the north side Rennie Street or along the freeway reserve along the south side of Rennie Street. A change to the cross section of Rennie Street would not be required outside of the provision of a shared path (i.e. no road widening).

A speed limit of 60km/h applies to Rennie Street to the north and south of the intersection with Canterbury Road East. This speed limit is appropriate for this style of road in this context and does not present a road safety issue.

Depending on the ultimate alignment of the shared path or footpath, raised shared path crossings could be provided to facilitate the crossing of Rennie Street either on the north side of the intersection with Canterbury Road east or closer to the Hovell Creek Crossing. This measure would have the added benefit of controlling speed through this section of Rennie Street.

24. We agree with the TIA assessment and consider the precise location of the controlled crossing of Rennie Street and trail can be determined when the Development Plan is prepared. Our preferred alignment is the 'black' line shown below, which would also follow the TIA C444 northern basin proposed outfall arrangement (p.17, Figure 8).

Source: Melways online

Source: Nearmap

25. DPO48 appropriately provides for the planning and delivery of the trail.

26. The TIA concludes that the surrounding bus network is able to be extended along Canterbury Road East. Council's 'Day 1' DPO48 Figure 1 has been amended to show the indicative Key Local Street providing two routes to enable improved bus circulation and accessibility within C444ggee.

27. It is also the opinion of the TIA that Nasmyth Street should be closed to reduce its attractiveness, so that local traffic heading to the Avalon Road interchange uses Archimedes Avenue. The TIA finds that Archimedes Avenue has characteristics of a higher order local road and is able to accommodate additional traffic. The TIA does not propose any upgrades to Nasmyth Street.

28. Council will monitor, assess and manage any material traffic impacts from the new developments, and make changes to the local road network as necessary. The introduction of Bus Route 18 using Archimedes Avenue will also be monitored by the Department of Transport and Planning (**DTP**) and Council. Should Amendment

C438ggee progress then the immediate area will require new urban infrastructure including road upgrades.

29. Closure of Nasmyth Street is not a requirement for the Amendments to proceed nor are provisions considered necessary for inclusion in either DPO48 or DDO55.

30. Regarding direct site access, the TIA undertook a site distance review of the indicative road access points shown to the C444ggee *Figure 1: South East Lara Residential Growth Area Framework Plan* and the C453ggee *Map 1: Lara Business Park Outline Development Plan*.

31. For C444ggee *Figure 1* the TIA on pages 82-83 assessed four access points and was satisfied the locations are appropriate, although noted that 'Indicative Vehicle Access Location 2' (shown on the TIA page 13, see below) may need to shift west to ensure compliance with Austroads Safe Intersection Sight Distance (SISD) criteria.

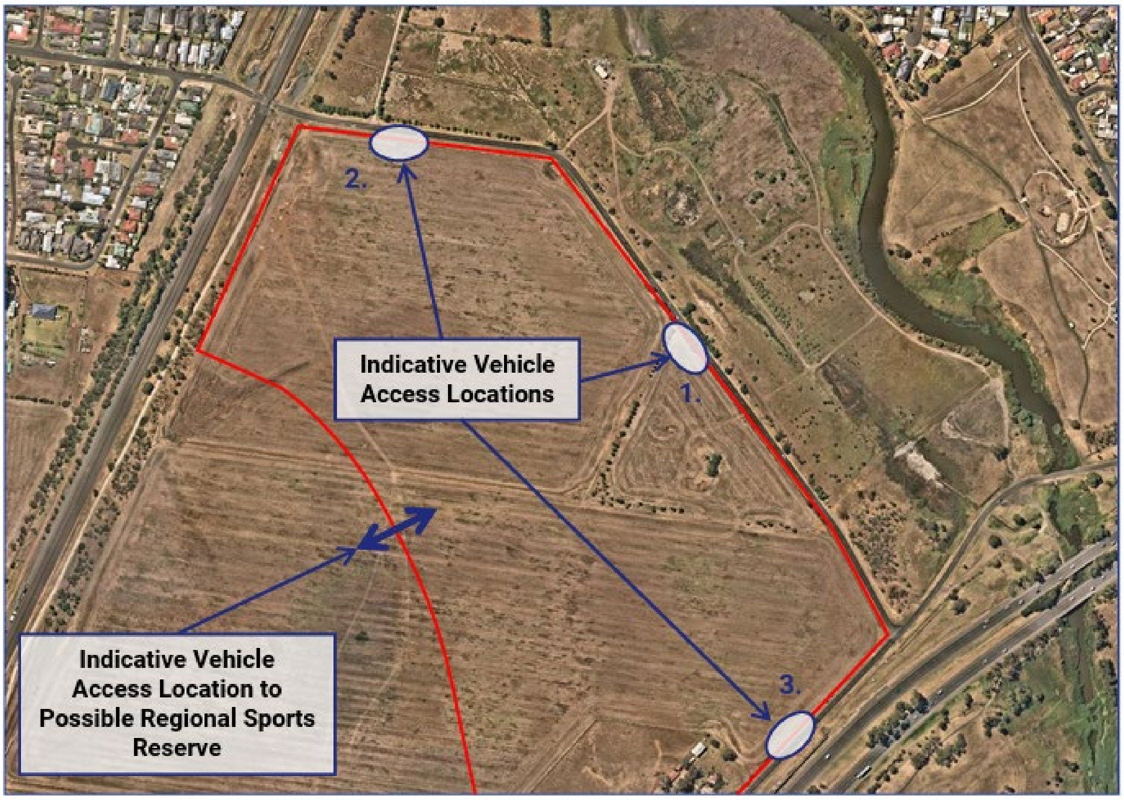


Figure 2: Indicative Vehicle Access Locations (Source: Nearmap)

32. We note an error that this assessment was based on a superseded framework plan and should have been assessed against the exhibited DPO48. The exhibited DPO48 *Figure 1*, which has now been amended in Council's Day 1 version, shows 'access location 2' shifted west. Given the DPO48 access location aligns with the TIA recommendation, and given the location is indicative and subject to further assessment

when preparing the Development Plan, we are satisfied with the locations shown on Council's Day 1 version.

33. For C453ggee *Map 1* the TIA on page 83 states the site access locations have yet to be formalised and are not shown on the in the framework plan. However, the TIA is satisfied that given Rennie Street is relatively straight, there will not be any potential sight distance issues for the industrial component accesses, subject to a formalised sight distance review. Similar to the error for C444ggee, the TIA reviewed framework plan (TIA p.15) was superseded by the exhibited DDO55 *Map 1*, which shows two site access locations. We note the locations in *Map 1* are indicative and able to be further assessed at subdivision permit application stage. This issue can be clarified by the traffic expects at the Hearing, though Council considers it is a relatively minor issue.

34. Overall, Council supports the TIA conclusions which have been faithfully applied to DPO48 and DDO55.

Railway level crossing

35. The TIA at Section 4.9 provides an assessment of the post-development traffic conditions (including the potential future residential land north of Canterbury Road East and the District Outdoor Sports Facility) traversing across the level crossing. It assesses that there will be 3,857 vehicle movements per day.

36. The TIA is satisfied with the operations of the Canterbury Road East railway crossing from a road safe perspective considering the anticipated traffic increase across the road. The TIA finds that while the volume of traffic will increase, the volume of traffic remains modest and the layout of the intersection, its isolation from other intersections and the level of control already provided means that the additional traffic can be safely accommodated.

37. Then at Section 4.12.4 the TIA assesses pedestrian and cyclist infrastructure requirements at the level crossing. It notes that the existing level crossing on Canterbury Road East does not currently provide any pedestrian facilities and would be required to be upgraded to accommodate pedestrian and cyclist movements across the rail line as part of developing the Amendments land.

38. The TIA finds (p. 77):

> The crossing of the rail line by pedestrians and cyclists would need to be suitable to accommodate a combined volume of in the order of 406 movements per day (396 predicted pedestrian volume + existing volume of 10 pedestrians) and a cyclist volume of 77 movements per day (33 predicted volume + 34 existing weekend trips, noting that this would be conservative as this demand is not present during the week).

> In our view the most appropriate solution would be incorporating an 'active gated control' into the existing level crossing on the south side of the road (i.e. the development side). The alternative solution of a grade separated pedestrian crossing would be impractical in this case. The active gated control would be suitable to accommodate pedestrians and cyclists (once cyclists have dismounted as per normal practice at a level crossing).

39. Council accepted the TIA finding, though following exhibition of the Amendments, DTP requested an Australian Level Crossing Assessment Model (ALCAM) be undertaken to determine the site risk rating and an examination of appropriate mitigation measures.

40. Lara Farms engaged Nelson-Furnell Pty Ltd, who completed the *Railway Crossing Risk Assessment Report, Canterbury Road East Level Crossing in Relation to Amendments C444GGEE and C453GGEE to the Greater Geelong Planning Scheme, 29 March 2026* (the **ALCAM Report**).

41. The ALCAM Report was circulated to all Distribution List parties by Norton Rose Fulbright on behalf of Lara Farms on Tuesday 7 April 2026. The ALCAM Report is published on the City's amendments webpage for both Amendments.

42. The ALCAM Report explains on page 1:

> Increasing the road traffic over a level crossing has the effect of increasing the risk of rail vs road collisions. Additional pedestrian movements also create a greater risk of rail vs pedestrian collisions.
>
> The Australian Level Crossing Assessment Model (**ALCAM**) is used to evaluate and compare risk at road and pedestrian railway crossings across Victoria and (Australian Standard, 2016) nationally. Head, Transport for Victoria (**HTfV**) has requested that a level crossing risk assessment be provided based on ALCAM for the purposes of determining the impacts of the Development on the safety of the Canterbury Road East crossing and to evaluate the need for any safety improvements which may be necessary.
>
> Nelson-Furnell Pty Ltd (**Nelson-Furnell**) are commissioned to provide this risk assessment and have attended the site to undertake an ALCAM site assessment which forms the basis of this report.
>
> Traffix Group have undertaken traffic modelling of road traffic originating from the Development[1] which will be used to inform the analysis in this report.

43. The ALCAM Report Executive Summary finds and recommends (page 5):

> Both of these developments will generate road traffic and the residential development will also create pedestrian and cycle traffic. A proportion of these additional traffic movements will pass over the Canterbury Road East railway level crossing.
>
> The rail corridor in this area incorporates the VLine and ARTC rail networks. VLine operate freight and passenger services which include high speed rail cars travelling at up to 160kph. ARTC operate both passenger and freight services. There are three rail lines, all carrying regular rail traffic, so train movements are complex.
>
> The road crossing at this site is appropriately controlled by train activated flashing lights and boom barriers, the highest level of control available for Victorian road crossings. All warning signage and line marking meet the AS1742 part 7 standard.

> There are some minor existing condition issues including some deep potholes in the ARTC track panel and collision damage to one of the secondary warning signs.
>
> Road traffic will increase by 73% by the completion of the Development which will increase the risk due to train collisions by 38%. This increased traffic is adequately accommodated by the existing crossing infrastructure.
>
> **No additional control upgrades to the road crossing are recommended.**
>
> There is only minimal existing pedestrian and cycle traffic currently using the crossing. Currently such users cross the tracks on the roadway, using the road signals as warnings when trains are approaching. As there are no pedestrian paths they are at risk of collision with road vehicles.
>
> The Development will increase this traffic to 483 crossing users per day. This means that pedestrians cannot safely use the roadway. **A formal pedestrian crossing facility is required on the southern side of the roadway.**
>
> Given the number and mixed speeds of the trains crossing it is not possible for pedestrians or cyclists to judge whether it is safe to cross. **An active pedestrian crossing with automatic gates and latched egress escape gates is recommended** to properly regulate pedestrians and prevent them from bypassing the controls.
>
> Wing and corridor fencing is required to prevent users from easily bypassing the pedestrian crossing.

44. It is clear that the ALCAM Report verifies the TIA 'active gated control' recommended infrastructure upgrade.

45. Council therefore continues to support the TIA level crossing upgrade works as required by DPO48. Following review of the ALCAM Report, we have drafted a specific DPO48 provision as shown in Council's Day 1 version.

46. We also note that our Day 1 DPO48 requires the upgrade works to be completed before the first dwelling is occupied. We don't agree with the TIA statement (p 74): *'The timing of these works can be determined through the planning stage of the project.'*

47. Given the serious safety risk of an uncontrolled pedestrian level crossing, we consider this requirement is necessary for several reasons:

    47.1. The TIA finds that 406 pedestrians per day and 77 cyclist per day will travel west on Canterbury Road for education (mainly to Lara Lake Primary School), work, shopping and social/ recreation purposes.

    47.2. The ALCAM Report states (p. 24) that the development will house families who will need to access Lara for purposes including shopping, school and recreation – some of these will travel on foot or by bicycle as the town is quite close. It notes an estimated average of 483 pedestrians and cyclists will use the crossing per day. The ALCAM Report finds *'It is unsafe for this quantity of pedestrians to continue to use the roadway when road traffic will also increase. A formal pedestrian crossing facility must be constructed as part of the Development'.*

47.3. The objectives of planning in Victoria (under the *Planning and Environment Act*) includes Objective (c) 'to secure a pleasant, efficient and safe working, living and recreational environment for all Victorians and visitors to Victoria.'

47.4. Clause 18 *Transport* says planning should ensure a safe, integrated and sustainable transport system.

47.5. Clause 18.01-1S *Land use and transport integration* includes the strategy: 'Plan the timely delivery of transport infrastructure and services to support changing land use and associated transport demands.' Another strategy is to: 'design neighbourhoods to respond to the safety needs of all users.'

47.6. The objective of Clause 19.03-2S *Infrastructure design and provision* is to provide timely, efficient and cost-effective development infrastructure that meets the needs of the community.

48. We support the inclusion of the level crossing upgrade requirements in DPO48. As most of the pedestrian and cyclist need for the 'active gated control' will be generated by future residents, it is appropriate that the C444ggee developer is responsible for funding and constructing (subject to ARTC/ VLine agreements) the works.

49. It is anticipated that Lara Farms will commence residential development before any industrial development, or the developments may occur simultaneously. Even were the C453ggee Business Park be developed early, it is highly unlikely that employees would walk the additional 1.5km from the railway crossing east along Canterbury Road East and then south along Rennie Street – and in the absence of any pedestrian infrastructure – to reach the industrial land.

50. Employees cycling to work would be presented with the same situation as currently experienced by the riders. the TIA recorded 34 recreational cyclists on Sunday 2 April 2022 who would travel along Canterbury Road East.

51. DDO55 does not include any specific subdivision requirement reference for level crossing works, though the Day 1 version has added the requested DTP provision (in green) to the following relevant provisions:

> If subdivision and development require the delivery of any off-site infrastructure, a permit condition or a Section 173 Agreement should be used to facilitate delivery of the infrastructure.
>
> Subdivision sequencing should generally support the efficient delivery of service infrastructure and road connections and support early delivery of public and active transport infrastructure.

52. Council's Part A submission informed of our recent discussions with Atkins Consulting for the landowners north of Canterbury Road East. This land was removed from C444ggee by agreement between the parties in October 2024 due to flooding constraints. Should a residential rezoning application be lodged in the future, any additional upgrade of the railway crossing including to Canterbury Road East in the immediate area, would be assessed as part of a separate planning scheme amendment.

53. We also note the ALCAM Report (p. 15) identifies that the road condition of the bitumen seal on the track panel is poor, including a deep hole next to the rail in the westbound lane. Then on page 21 the ALCAM Report says:

> **5.6. EXISTING CROSSING - COMMENTS AND RECOMMENDATIONS**
>
> This road crossing is well controlled and constructed to meet Australian Standards. While the rail traffic is moderately heavy and consists mainly of high-speed passenger trains, the boom barrier controls provide adequate warning and impose a visual barrier which is effective in minimising the risk of drivers crossing against the controls.
>
> The only significant local infrastructure risk is created by the poor track panel condition, particularly the pot holes around the rails shown in Figure 6.
>
> It is recommended that repairs be prioritised by ARTC.

Note: ARTC stands for Australian Rail Track Corporation.

54. Canterbury Road East is a local road under the management of the City. There is an agreement in place with ARTC/ VLine which defines the responsibilities of each party with regards to infrastructure near a rail crossing. The rail operator is responsible for the pavement within 3 metres of the rail and all hardware associated with the safety of the crossing.

55. Consistent with the ALCAM Report recommendation, we submit DTP should inform ARTC of the poor track panel condition.

56. Whether an arrangement between ARTC and Lara Farms can be arranged for the repairs to be undertaken as part of the TIA upgrade works, is a matter for the parties to resolve. In that situation however, the repairs would be some years off. This scenario is considered unacceptable, and it is Council's submission that ARTC undertake the works immediately.

THE FLOOD IMPACT ASSESSMENT

57. The Loetis *Stormwater Management Strategy, Lara Farms – Rennie St, Lara, November 2024* (**SWMS**) was prepared to accompany the Amendments. The SWMS is intended to be read in conjunction with and support both C444ggee and C453ggee due to the shared stormwater catchments and proposed treatment assets.

58. The SWMS provides some background to flood planning by the City and existing flood conditions in Section 3.2.3 on pages 11-12:

> The City of Greater Geelong commissioned a flood study within the Lara catchment in 2018 and this was finalised in 2020. The results of this flood study were proposed to be incorporated into the local planning scheme via a planning scheme amendment, however, following extensive community consultation, the proposed amendment has been abandoned.
>
> It is noted that the proposed amendment would have identified part of the subject site as prone to flooding, however due to the abandonment of the process no formal designation has arisen. It is noted however that the identified areas of flooding on the site are a result of flows generated from rainfall falling directly on the site and not from flows external to the site running onto the site. This identified areas of flooding is considered in part a result of the modelling approach undertaken (rain on grid) along with the flat nature of the site and the high-level scale of the modelling works.
>
> Following liaison with Council officers, it is not considered as required to undertake flood modelling of the site and reference should be made to the catchment analysis in this report and in the Venant Solutions Report Lara Farms – Preliminary Retarding Basin Requirements, M.M00441.03.00_RB_Analysis_Optimised and the Venant Solutions Lara Farms – Flood Impact Report L.M00441.01.00_FIA.docx.
>
> There are Flood Overlays adjacent to the subject site along Hovells Creek, however they do not extend to the subject site.

59. The *Lara Farms – Flood Impact Report, Venant Solutions Pty Ltd, 14 June 2024* (**Flood Report**) is presented in **Attachment D**. The Flood Report says:

> The City of Greater Geelong (CoGG) Design Notes require a flood impact report for all rezoning applications within or adjacent to any known or likely flood-prone areas. The flood impact assessment report considers riverine flooding and is separate from a drainage feasibility report (stormwater management strategy), also required by the Design Notes, which considers local catchment runoff. This letter documents the flood impact assessment for the Site.

60. The Flood Report concludes:

> …that the Site is unaffected by riverine flooding and hence changes to ground elevations (cut/fill) will not cause flood impacts. The development of the Site will increase runoff in a local catchment event and management of this is documented in the Stormwater Management Study prepared by Loetis.

61. Council has accepted the Flood Report. Our Senior Stormwater Engineer comments as follows:

- The Lara Flood Study 2020 identified the land as subject to flooding during the 1% AEP event.
- The land is designated as liable to flooding for the purposes of Building Regulations 2018 reg 153.
- Flood modelling has been updated in 2025 as part of the Hovells Creek Catchment Management Strategy. Draft 1% AEP depth mapping including climate change (SSP3) is shown below:

- July 2022 advice from the Infrastructure Planning Unit stated:

  Flood Impact Analysis is required to demonstrate all new lots can be made flood free up to the 1%AEP extent and that development will not cause adverse impact to upstream and downstream property and authority infrastructure relating to flood depth, extent, velocity, and duration. This may include (as appropriate) details of cut and fill, 2D hydraulic modelling, conveyance, and demonstration of safe egress.

- A letter entitled LARA FARMS – FLOOD IMPACT REPORT (Venant Solutions, June 2024, L.M00441.01.00_FIA) is attached to the Stormwater Management Strategy (Loetis, Nov 2024, Rev06).
- Venant concludes that a Flood Impact Assessment include modelling of the catchment (FIA) is not required, as the site is not subject to riverine flooding and the site's location in the catchment means the management of local catchment runoff is fully addressed in the Stormwater Management Study.
- The City disagrees with the assertion that the need for a FIA be restricted to consideration of riverine flooding.
- Notwithstanding the above, the nature of flooding is such that a detailed stormwater management strategy can cover the items noted previously.

62. Council is satisfied that flood impacts have been appropriately assessed by the SWMS for the rezonings. We note the SWMS must be given regard to when preparing a Development Plan or when lodging a Permit Application responding to the DDO55 subdivision requirements, in addition to other overlay stormwater requirements.

63. We also note the Corangamite Catchment Management Authority (**CCMA**) provided advice in 2022 on referral of the original C444ggee application, which included the land north of Canterbury Road East. The referral advice is copied in **Attachment E**.

64. The CCMA was a submitter (no. 5) to the exhibited C444ggee and did not object. The CCMA advised:

> Hovells Creek flows to the north and east of the subject site. The results of the Lara Flood Study 2020 show that the site is not expected to be impacted by riverine flooding during a 1% AEP flood event. (Refer to Figure 1).

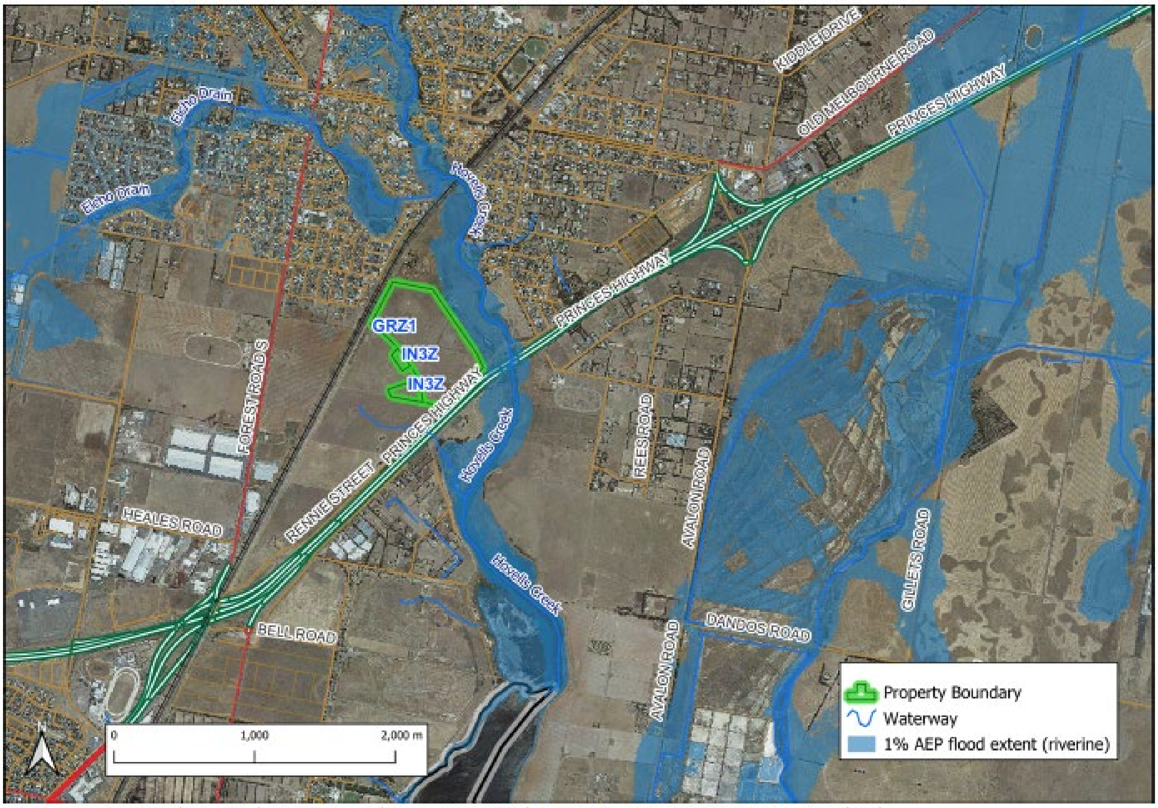


Figure 1. Subject property (green outline) showing the applicable 1% AEP flood extent.

65. The CCMA was also a submitter (no. 4) to the exhibited C453ggee and did not object. The CCMA advised:

> Hovells Creek flows to the north and east of the subject site. The results of the Lara Flood Study 2020 show that the site is not expected to be impacted by riverine flooding during a 1% AEP flood event. (Refer to Figure 1).

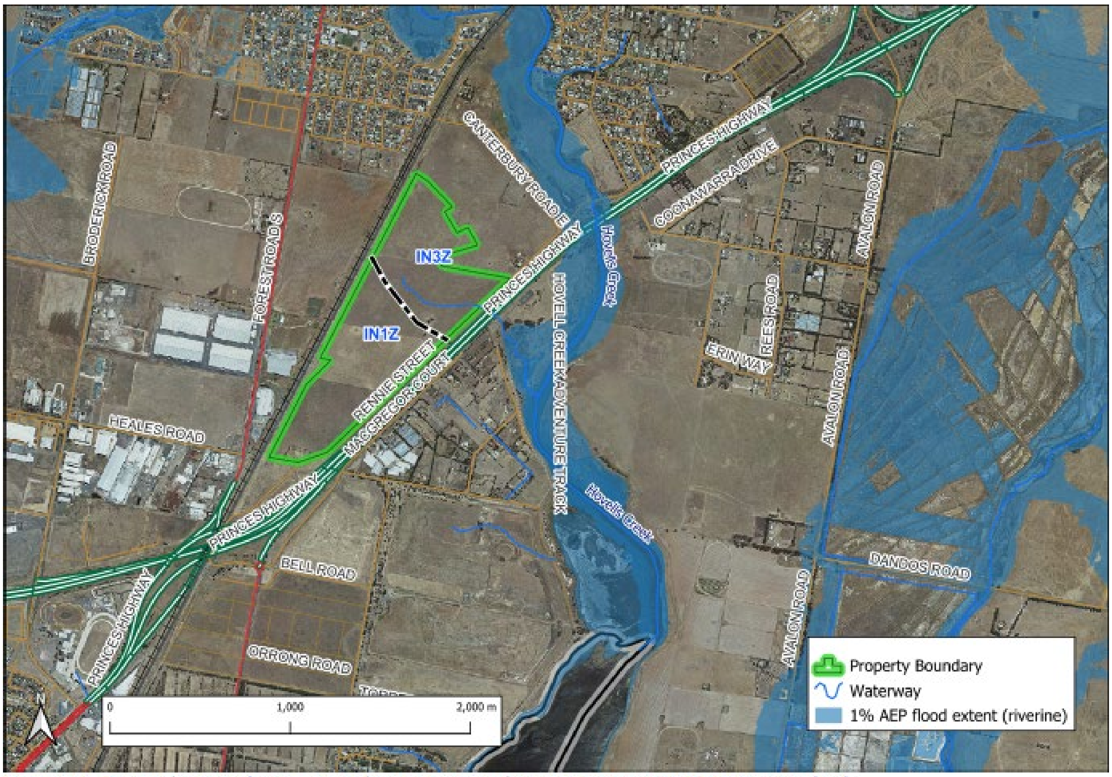


Figure 1. Subject property (green outline) showing the applicable 1% AEP flood extent.

RESPONSE TO ISSUES RAISED IN SUBMISSIONS

Traffic and road infrastructure issues

66. Exhibition of the Amendments attracted local resident objections on several grounds including:

    66.1. General increase in traffic and delays

    66.2. Inadequate road infrastructure

    66.3. Rennie Street bridge flooding

    66.4. Canterbury Road East railway level crossing safety concerns

    66.5. Increased noise levels

67. DTP, though generally supportive of the Amendments, requested completion of a combined C444ggee and C453ggee TIA to properly understand the impacts on the arterial road network and railway crossing.

68. As highlighted in Council's Part A Submission, Traffix Group prepared a combined TIA. The TIA concludes that (p. 97) '*there are no traffic engineering reasons why the proposed rezoning of the land at 76156 Canterbury Road East, 705-765 Princes Highway, 785-805 Princes Highway & 610 Rennie Street, Lara (C444ggee and C453ggee) should not be approved*.'

69. The TIA provides a response to Council and DTP concerns in Section 5 (pages 90-96). Council has accepted the TIA, which must be given regard under the DPO48 and DDO55 provisions. Resident objections were addressed in the Delegates Repot and have been further scrutinised by the TIA.

70. Regarding the TIA recommended 'active gated control' to facilitate safe pedestrian movements, we accept the recommended upgrade which has been verified by the ALCAM assessment.

71. Lara Farms has also filed traffic engineering evidence from the Traffix Group, the author of the TIA, but also from a second expert. The second expert, Mr De Young from Eukai, has essentially provided an independent review of the TIA.

72. We rely on the evidence of the experts, who both support the Amendments, subject to applying the TIA recommendations.

73. Mr De Young is of the opinion that:

    - The subject land is strategically located within an identified urban growth corridor and is proximate to key transport infrastructure, including the Princes Freeway, Geelong Ring Road and established arterial connections.

- The surrounding road network comprises a hierarchy of Collector and Local Access Roads that provide multiple connections to regional and local destinations. Importantly, the existing network currently operates within its theoretical capacity, with demonstrated latent capacity available to accommodate future growth. Notwithstanding this, I acknowledge there are some existing constraints in the vicinity of the site such as the Rennie Street floodway and Nasmyth Street.

- In relation to key transport matters raised through submissions, I am satisfied that these have been appropriately considered and addressed. Specifically:
  - I consider that the surrounding road network, including Rennie Street, Archimedes Avenue and Watt Street, has sufficient capacity to accommodate forecast traffic demands associated with the development.
  - I consider that localised constraints, such as the condition and function of Nasmyth Street and the operation of the Rennie Street floodway, can be effectively managed through typical and implementable mitigation measures and do not represent barriers to development.
  - I consider that the nearby major transport infrastructure at the Avalon Road interchange and Canterbury Road East level crossing (with the provision of a pedestrian crossing as recommended in the ALCAM Risk Assessment) can be expected to operate within acceptable limits under post-development conditions.

- The planning framework accompanying the Amendments require the preparation of additional reports that will help ensure that any outstanding and/or detailed transport matters, such as internal road layouts, intersection treatments, active transport provision and public transport integration, will be resolved through the Development Plan and subsequent planning permit processes.

- The Traffix TIA report prepared to present a cumulative assessment of the Amendments contains reasonable traffic generation rates, distribution assumptions and capacity analysis. This analysis confirms that surrounding intersections are expected to operate at acceptable Levels of Service (LOS C or better) and that midblock capacity limits are not expected to be exceeded under post-development conditions.

74. Acoustics evidence from Mr Evans finds that existing noise levels are already significantly affected by road traffic noise from the Princes Highway and rail noise from the V/Line. Mr Evans does not expect that any change arising from relatively low levels of traffic would result in a noticed increase in noise level for the surrounding residential area.

75. Mr Evans also assessed noise impacts from the Highway and rail line on future C444ggee residents and has suggested improvements to the DPO48 requirements which are agreed.

High pressure pipeline issues

76. Council considered submissions to the Amendments from Viva Energy Australia and APA Group in the Delegate's Report Attachment 2 (Tables 1 and 2).

77. We continue to rely on the Delegate's Report response which are translated into Council's Day 1 DPO and DDO. We have agreed on the drafting for the high-pressure oil pipelines with Viva Energy, though welcome further review (for both oil and gas

pipes) at the Hearing, and in light of the planning and process safety engineering evidence.

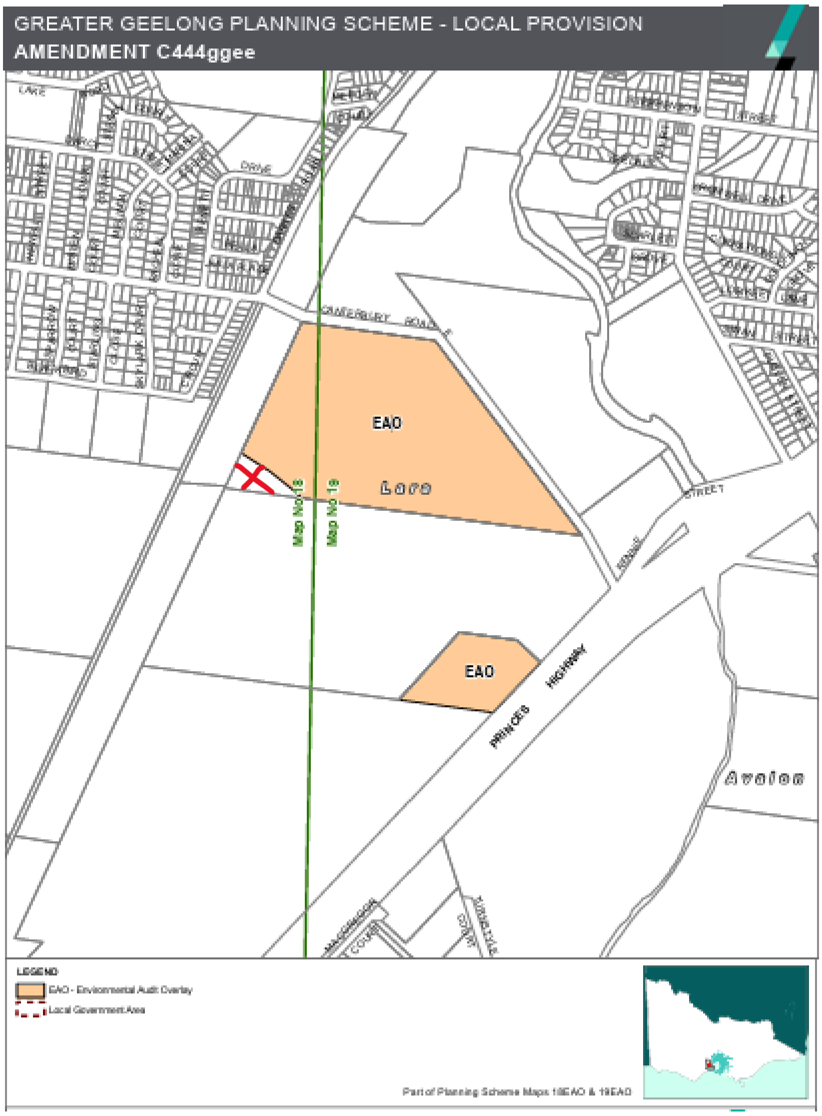
Potentially contaminated land

78. EPA does not object to the Amendments.

79. For C453ggee EPA submitted:

> Given that IN3Z allows some sensitive uses (childcare centre and informal outdoor education, which may include a children's playground), the EAO should extend across the entire property to ensure that audit system requirements are completed where a sensitive land use is proposed. This will ensure that the risk of harm from potentially contaminated land is addressed.
>
> This approach would align with the completed PRSA (prepared by AAA Environmental Pty Ltd, dated 21 June 2023), which recommends that the environmental audit should apply to the cadastral boundary of 76–156 Canterbury Road.

80. We agree to change Map 18EAO by adding the EAO to 76-156 Canterbury Road East as noted with the red cross below.



Avalon Airport

81. Macroplan was commissioned by Avalon Airport Australia Pty Ltd to provide an independent review of C453ggee.

82. The submission does not object to the strategic merit of the amendment, though it does raise concerns about a lack of short-term need for industrial land supply and early sequencing. It also makes infrastructure submissions. We do not agree with the submission.

83. The suggested required works to Rennie Street are not agreed. The TIA finds that Rennie Street outside the development will require upgrade to include kerb and channel, possibly a parking lane and lower speed limit. The TIA assessed development impacts on the Freeway on-ramp and was satisfied the impacts are not significant. DTP support this finding.

84. The suggestion to delay the rezoning until Council completes its industrial land supply review is also not agreed. The review is primarily an audit and forecasting exercise to be completed in early 2026 (a summary is provided in our Part A). The review report will help inform preparation of a municipal Industrial Land Use Strategy, likely to commence in June 2026.

85. We note Avalon Airport have not chosen to appear at this Hearing and put forward further substantive arguments opposing C453ggee. Nor have they provided any civil infrastructure engineering evidence to support their submissions for early infrastructure.

86. Our position is supported by the evidence of Mr McNeil.

Lara Lake Primary School Capacity

87. Several Lara residents object on the grounds that the local State Government primary school is currently at capacity and unable to accommodate more students. Council did not receive a submission from the Department of Education (DoE), though we did discuss C444ggee at a high level with DoE staff on 19 January 2026.

88. The DoE regularly reviews school enrolments and consults Council on population projections, residential rezonings, development timeframes and housing approval data. The Lara Lake Primary School zone covers a large area including the C444ggee land.

89. Lara Primary School is the second public primary school in the area located on Flinders Avenue. There is also a Catholic Primary School on Kees Road. In addition, the DoE is planning for a primary school on O'Hallorans Road within the Lara West Urban Growth

Area. Planning for the new school is in the very early stages and will not be delivered for several years, likely on a similar time trajectory to development of C444ggee.

90. In summary, future enrolment pressures on Lara Lake Primary School will be carefully monitored be DoE. DoE are able to change school zone areas in Lara and undertake facilities planning to ensure schools continue to operate within capacity.

91. We note the TIA analysed impacts of the development on the local road network, including relevant intersections, at school start and finish times. The analysis found the road network would continue to operate under a Level of Service A (‘Excellent’) except for the Forest Rd South/ Canterbury Rd intersection (roundabout) which would operate at a decreased level of performance. However, the level of impact to the operation of the roundabout was considered to be acceptable.

RESPONSE TO EVIDENCE

92. Lara Farms commissioned several expert witness statements for this Hearing, being:

    92.1. Mr Chris McNeill of Colliers (economics);

    92.2. Mr Mark Woodland of Urbis (planning);

    92.3. Mr Tim De Young of Eukai (traffic engineering);

    92.4. Mr Leigh Furness of Traffix Group (traffic engineering);

    92.5. Ms Nina Barich of Incitus (drainage);

    92.6. Mr Tom Evans of Resonate (acoustics); and

    92.7. Mr Nigel Cann of Arup (process safety engineering).

93. We respond to each expert evidence discipline below.

Economics

94. Mr McNeill investigates the current status and forecasts for the Lara and broader regional housing and industrial markets. He has also drawn on the City's 2025 Industrial Land Supply Review (refer to it as the 'draft CKC Report') which we outlined in our Part A submission.

95. Some of Mr McNeill's key findings are:

> Residential Assessment
> In terms of the residential component of the Subject Land in Lara, it is my opinion that the additional residential supply afforded by proposed Amendment C444 will represent an important addition to local supply in Lara and a meaningful short-term addition to Greater Geelong's broader supply of residential land.
>
> Industrial Assessment
> It is evident when reviewing the analysis contained in the draft CKC Report and its general findings that Greater Geelong is in need of additional industrial land supply in both the northern and southern parts of Geelong.
>
> In particular, there is a need for additional land supply in the short term that is readily available for smaller industrial users, including those that provide opportunities for general-purpose industry needs. This includes people-generated industry such as automotive repairs, trade supplies, gymnasiums and so on that are typically accommodated in the Industrial 1 Zone or the Industrial 3 Zone where no subdivision restrictions exist.
>
> In my opinion, that part of the Subject Land identified to be zoned Industrial 1 Zone and Industrial 3 Zone will address these needs as well as providing additional land for medium and larger industrial users if required.
>
> Importantly, the Subject Land is also likely to provide additional industrial land in the relatively short term. This is a specific need in the Greater Geelong context as most Future

> Precincts (land identified for future industrial development) are unlikely to be available to the market in the short term.

96. We agree with the opinions of Mr McNeill, which provide clear support for the Amendments.

97. A minor clarification of the evidence, is that to page 12 (para 2.22) which discusses Plan for Victoria (2025) and states:

> Geelong's settlement boundary is depicted in Map 15: Geelong in the Future of Plan for Victoria (refer Figure 2 below). The Subject Land is not located within the settlement boundary area and is designated as 'rural land'.

98. Mr McNeill's 'Figure 2' is shown in **Attachment F**. While the C453ggee land is located outside the Geelong settlement boundary, the C444ggee land is located within the Geelong settlement boundary.

99. The same error is stated in paragraph 2.45 regarding Council's Housing and settlement framework Plan (Clause 02.04-3). And the same clarification applies.

100. With regard to the timing of GAEP West development, Mr McNeill says elements of the development are a 'short-term proposition'. We caution on the timing and consider business operations are more likely to commence in the medium to longer term. This is because (in addition to the DDO referred to in the evidence) a Development Plan will need to be prepared.

101. Proposed DPO50 forms part of Draft Amendment C477ggee GAEP West. The DPO places very significant environmental, stormwater drainage and other infrastructure requirements to be assessed before a Development Plan can be approved and permit applications lodged. Constructing and connecting the infrastructure will also be time consuming. The Victorian Planning Authority had originally planned to prepare a Precinct Structure Plan and Development Contributions Plan, though this work was effectively deferred to the preparation of a Development Plan. Like C453ggee, GAEP West drains to a RAMSAR site.

102. Mr McNeil also responds to the Avalon Airport submission which we addressed earlier in our submission. We agree with Mr McNeill's opinions, particularly his finding on the differing roles of the industrial precincts (para 5.17):

> In summary, the SGS Economic Scoping Study contemplates a scale and rate of development at the GAEP that is state and regionally significant and, in my opinion, unlikely to compete directly with more localised industrial precincts such as the Lara Business Precinct.

Planning

103. We note that Mr Woodland's planning expert evidence provides overwhelming support for both Amendments. We agree with Mr Woodland's conclusions on this topic.

Response to recommended changes

104. The only topics recommended by Mr Woodland for further consideration via potential drafting changes relate to high pressure pipelines in both amendments (for DPO48 and DDO55), and tree canopy coverage (DD055).

105. In relation to the high-pressure pipelines, for DPO48, Mr Woodland recommends inclusion of:

105.1. a definition of the relevant sensitive uses

105.2. identification of the relevant buffer area(s) on the ODP contained within the schedule

105.3. a provision requiring that notice be given to the pipeline licensees of any application for sensitive uses or the carrying out of works within the defined buffer area/s, and

105.4. a provision requiring approval of a construction management plan prior to the commencement of works on or close to the boundary of the pipeline easement.

106. For DDO55, Mr Woodland recommends inclusion of:

106.1. A provision in DDO55 requiring approval of a construction management plan (CMP) to deal with relevant protective works prior to the commencement of works on land within or adjacent to any pipeline easement, and

106.2. Provisions requiring that notice be given to the pipeline licensees of any application for sensitive uses or for the carrying out of works within the defined buffer area/s

106.3. An Objective and Decision Guideline in DDO55 relating to the management of risk to people within the high-pressure pipeline buffer.

107. In both cases, Mr Woodland's evidence does not provide recommended revised drafting for these revisions, rather deferring this until other latest documentation is available.

108. Council has no objection in principle to these items being included in the proposed ordinance, subject to detailed drafting considerations, including for example whether dealt with as DP requirements, application requirements, or permit conditions. It would be most appropriate to discuss these in the Panel Hearing when all information is

available when discussing re-drafting. We note Mr Woodland had not reviewed the process safety engineering evidence, which is discussed below.

109. In relation to canopy tree coverage, Mr Woodland recommends that the tree canopy requirement in DDO55 be amended to specify that landscaping should demonstrate how it is *contributing towards* achieving the 30 percent target contained in Plan for Victoria.

110. Council notes this a very minor change to wording but expresses some reservation about the appropriateness of its change. We consider this would be most appropriately discussed at the Panel Hearing when all information is available, and when discussing re-drafting.

Potential Updates/Errors/Clarifications

111. Mr Woodland's evidence references MD11 (Paragraph 131 and Appendix C of the evidence) and MD12 (Paragraph 250 and Appendix D of the evidence).

112. We highlight that MD11 and MD12 were very recently updated (on 27 March 2026), to clarify guidance for decision-makers' on how competing policy objectives are to be balanced to ensure consistent and transparent decision-making processes in the planning scheme amendment process. The assessment against strategic considerations may need to be updated accordingly.

113. For clarity, we highlight that the Housing and Settlement Framework Plan at Cl.02.04-3 of the Greater Geelong Planning Scheme was updated following VC245 13/02/2026. The update does not directly impact the area of the subject site.

114. Mr Woodland's evidence (Para 53 and Figure 3) includes an extract of the out-dated version of the Housing and Settlement Framework plan.

115. In referring to the location of Geelong's existing industrial areas Mr Woodland's evidence (Para 66) erroneously refers to Figure 3 (which refers to the plan at Cl.02.04-3), rather than Municipal Framework Plan at Cl.02.04-1 which shows the existing industrial areas.

116. Paragraph 305 of Mr Woodland's evidence refers to the UGZ, we presume the reference is intended to be to the GRZ.

117. Council considers these items do not impact the conclusions reached by the evidence of the overwhelming strategic support for the amendment.

Other Items

118. We highlight Council's agreement with Mr Woodland's opinion referenced at page 47 footnote 34 regarding classification and interpretation of the settlement boundaries.

119. We also highlight Council's agreement with Mr Woodland's opinion referenced at page 48 footnote 35 regarding the role of the current Industrial Land Supply Review.

Traffic engineering

120. We rely and accept the evidence of Mr Furness and Mr De Young. Both experts find there are no traffic engineering reasons why the Amendments should not be approved. Mr De Young supports the ALCAM risk assessment findings.

121. The experts are also generally supportive of the DPO48 and DDO55 road network and traffic provisions. We have already submitted that the railway level crossing works should be completed early in the C444ggee development and provided reasons why this should be the case.

Drainage

122. Ms Barish is of the opinion that:

122.1. the stormwater management for the proposed rezoning of the site completed to date demonstrates a reasonable compliance with these stormwater management objectives, at the time the studies were completed.

122.2. the minor drainage standards for development of the site can be achieved with development layouts and demonstrated through future planning permit applications.

122.3. development of this site can be designed to comply with the requirements of flood protection for future allotments and safe conveyance of overland flow.

122.4. development of this site can mitigate the runoff discharging from the site to existing flow magnitudes, even with the consideration of climate change for both current and future conditions.

122.5. any development of this site can meet the stormwater quality targets required with the incorporation of a constructed wetland system in the drainage reserve as proposed in the stormwater management strategy.

122.6. the major drainage reserves are appropriately located for stormwater management within the site.

122.7. the site has demonstrated that it is not likely to result in any significant environmental harm to the Limeburners Bay Ramsar Wetland with respect to stormwater.

123. Council, as stated earlier in the submission, has accepted the SMWS. The evidence of Ms Barish provides an independent review confirming the SWMS provides a sound basis to develop the Amendments land from a stormwater management perspective.

124. At Section 11, Ms Barish provides opinions on several of the DPO48 and DDO55 requirements. Both overlay schedules reference EPA Publication 1739.1.

125. Other suggested changes will be further addressed at the Hearing based on our assessment in **Attachment G**.

126. On page 18 Ms Barish refers to the Delegate's Report recommendation to amend DDO55 to require preparation of a stormwater volume management strategy. She is of the opinion that no additional requirement is required.

127. Council's recommendation was in response to the C453ggee CCMA submission (#4) and disappointment with the SWMS conclusion that options to reduce stormwater volumes were impractical.

128. In reply, the Delegate's Report (pdf p. 29) said:

> Regarding the note of disappointment, and in the context that Council supports the Loetis SWMS (informed by the Venant Solutions report), there may be opportunities to investigate reasonably practical options at the detailed planning stage.
>
> The Venant Solutions report says:
>
> 1) *'Rainwater tanks were not assessed for the business park because the benefit would be significantly dependent on the business water requirements, and this is not known at this stage'* (p. 33).
> 2) *'The business park raingardens would make a reasonable contribution to volume reduction but Lara Farms Pty Ltd advised that their implementation in a business park environment would not be practical because it would involve creating encumbrances on lots where the specific requirements for each lot has not been ascertained, e.g. truck egress and ingress requirements, equipment movements in and around the sites, hard stand on the site and placement of sheds. Therefore, they were not considered to be a reasonably practicable option and hence were not included in the Hovells Creek impact modelling'* (p. 35).
>
> Further review is consistent with DDO55 design objective: 'To promote best practice stormwater quality, management and reuse measures that protect, and conserve biodiversity and waterway values of the Ramsar Wetlands and Hovells Creek.' DDO to be revised to require preparation of a stormwater volume management strategy.

129. Council's Day 1 DDO55 has added the following provision (in blue):

5.0 **Application requirements**

--/--/----
Proposed C453ggee

The following application requirements apply to an application for a permit under Clause 43.02, in addition to those specified elsewhere in the scheme and must accompany an application, as appropriate, to the satisfaction of the responsible authority:

- A design response which provides a detailed design statement including an assessment of how the proposed development responds to the requirements outlined in Clause 2.0.
- A Stormwater Volume Management Strategy that assesses how stormwater volume leaving the land can be reduced to the extent reasonably practical (under EPA Publication 1739.1) and includes:
  - Targets for volume reduction, informed by the downstream Limeburners Bay Ramsar biodiversity values.
  - Volume reduction measures to be integrated into the detailed design of the subdivision and incorporated into lots.
  - Measures proposed within reserves created as part of the subdivision.

130. We think it a reasonable and necessary addition.

131. The application requirement directly responds to the Venant Solutions Report Chapter 4.3 *Volume Mitigation Scenario Assessments* (p. 33-36) contained within the SWMS Appendix 1.

132. Ms Barish fails to consider cumulative impacts to Limeburners Bay from changes external to the C453ggee land, either already underway or planned to progress (GAEP, NWGGA, Lara West and Manzeene Village, GRREP etc). An approach of planning the catchment on a case-by-case basis means that nobody has sight lines on the bigger picture, and we end up with many smaller development areas ultimately contributing to significant changes to hydrology or pollutant loads. This isn't to say that C453ggee needs to address everyone else's water, but the context of broader changes in the catchment results in an increased need to reduce as much of the impact from this site as possible.

133. The SWMS 9% (wetland) reduction in impervious mean annual runoff (MAR) volume from the industrial area is a poor outcome. This reduction is in comparison to the planned residential (wetland + rainwater tanks with 50% roof to tank) of 31%.

Acoustics

134. We accept the findings of Mr Evans and have updated the DPO48 'Traffic and Rail Noise Impact Assessment' provisions accordingly.

135. We agree with his finding that the proposed industrial zoning and future industrial uses will not adversely impact on nearby residents in Blackbird Circuit and MacGregor Court.

136. On impacts to the C444ggee land Mr Evans says (p. 23):

> Regarding the note of disappointment, and in the context that Council supports the Loetis SWMS (informed by the Venant Solutions report), there may be opportunities to investigate reasonably practical options at the detailed planning stage.

Process safety engineering

137. Council welcomes the evidence of Mr Cann. Mr Cann has experience in planning, advising and assessing on matters related to high pressure pipelines, including the facilitation of Safety Management Studies (SMS).

138. After a review of the existing APA (gas) and Viva Energy (oil) pipeline infrastructure, the proposed Amendments and the proposed planning controls, Mr Cann is of the opinion that:

138.1. For C444ggee:

> the addition of a figure in DPO48 to differentiate the Viva and APA pipelines is appropriate as this will aid future applicants in understanding which pipeline operator they should be consulting and to also differentiate APA's concept of an area of consequence from Viva's use of measurement length. This opinion is subject to Council's "Day 1" version of the amendments to be circulated on 13 April, 2026.
>
> the addition of the respective measurement lengths of the Viva pipelines and area of consequence of the APA pipelines would enhance the value of DPO48 to future land uses. However, such indications should state that these did not preclude full investigation by "Before You Dig" processes.
>
> Viva Energy indicates that the oil pipelines are not designed or in a condition to meet the requirements of a residential (T1) land use and that additional protection would be highly likely as an outcome of SMS studies of the Western Altona Geelong (WAG) and White oil Pipeline (WOPL) pipelines. In my opinion, it is appropriate that a requirement to engage with Viva Energy be in place with specific reference to the WAG and WOPL pipelines. It is beyond my expertise to form an opinion on the appropriate planning instrument by which to obtain this outcome. This opinion is subject to Council's "Day 1" version of the amendments to be circulated on 13 April 2026.
>
> the optimum timing for the land use change SMS workshop for the Residential Amendment is when details of the design and construction methods are known at the time for an application for a planning permit. An SMS need not take full account of land use which is planned but not implemented. This is in accordance with AS/NZS 2885.6 section 2.1.

138.2. For C453ggee:

> the addition of a figure in DDO55 to differentiate the Viva and APA pipelines is appropriate as this will aid future applicants in understanding which pipeline operator they should be consulting and to also differentiate APA's concept of an area of consequence from Viva's use of measurement length. This opinion is subject to Council's "Day 1" version of the amendments to be circulated on 13 April, 2026.
>
> the addition of the respective measurement lengths of the Viva pipelines and area of consequence of the APA pipelines would enhance the value of DDO55 to future land uses. However, such indications should state that these did not preclude full investigation by "Before You Dig" processes.

> it is beyond my expertise to form an opinion on the appropriate planning instrument in which to obtain this outcome.
>
> that Viva Energy indicates that the oil pipelines are not designed or in a condition to meet the requirements of a residential (T1) land use and that additional protection would be highly likely as an outcome of SMS studies of the WAG and WOPL pipelines. In my opinion, it is therefore appropriate for such a requirement and a condition to be in place with specific reference to the WAG and WOPL pipelines. It is beyond my expertise to form an opinion on the appropriate planning instrument in which to obtain this outcome. This opinion is subject to Council's "Day 1" version of the amendments to be circulated on 13 April 2026.
>
> The optimum timing for the land use change SMS workshop for the Business Park Amendment is when details of the design and construction methods are known at the time for an application for a planning permit. An SMS need not take full account of land use which is planned but not implemented. This is in accordance with AS/NZS 2885.6 section 2.1.

139. We note our Part A submission agreement with Viva Energy for the Day 1 overlay schedule controls. The changes are considered to be consistent with the opinions of Mr Cann.

140. We do not consider the planning system needs to indicate separate 'Before You Dig' investigation processes. In Victoria, while mandatory legislation is still pending implementation, it is best practice and also a legal duty of care under the *Occupational Health and Safety Act 2004*.

141. On the evidence of Mr Cann that (for both gas and oil pipelines): '*the optimum timing for the land use change SMS workshop is when details of the design and construction methods are known <u>at the time for an application for a planning permit*'</u>, we say:

*Council emphasis

141.1. DPO48 sub-clause 4.0 appropriately requires preparation of pipeline plans at the Development Plan preparation stage. Given that Lara Farms is the land developer (i.e. the developer is Costa Property Group), it is our experience that for a subdivision size of around 600 residential lots, the developer will most likely submit a multi-lot subdivision permit application concurrent with preparing a Development Plan. This means details of the design and construction methods will be known and assessed when the application is lodged.

141.2. The alternative DPO48 approach of moving the requirement to prepare pipeline plans to sub-section 3.0 *Conditions and requirements for permits*, would be too late in the approvals process and not consistent with Mr Cann's evidence.

141.3. DDO55 appropriately requires preparation of a SMS as part of a planning permit application. The evidence does not differentiate between a subdivision application and a buildings and works application for permit, however we consider minor or inconsequential buildings and works applications should be afforded discretion to prepare a SMS.

COUNCIL'S FINAL POSITION ON THE AMENDMENTS

142. We highlight that no submission provides substantive challenge to the strategic planning merit of the Amendments. All the evidence statements support the Amendments. Indeed, the economics and planning evidence find the additional industrial and residential land supply will have significant affordability and employment benefits for the Lara community and the broader region.

143. Council is committed to delivering on its housing targets set by the State Government in Plan for Victoria (DTP 2025).

144. Council is of the view that site constraints and development impacts have been appropriately assessed and translated as necessary into DPO48 and DDO55. We acknowledge the general support for the Amendments from the following agencies and authorities:

 144.1. The Head, Transport for Victoria (DTP);

 144.2. Barwon Water;

 144.3. Corangamite Catchment Management Authority;

 144.4. Department of Energy, Environment and Climate Action;

 144.5. Environment Protection Authority;

 144.6. Viva Energy Australia; and

 144.7. APA Group

145. Council proposes improvements to the exhibited documents as set out in the 'Day 1' documents and explained in the Part A Submission and this Submission. We will work with other parties proposing any reasonable improvements to the drafting, noting some recommended changes by experts are under active consideration.

146. A final response to the evidence and submissions and new matters raised (if possible) will be at the close of the Panel Hearing, in our closing submissions.

CONCLUSION

147. This completes the ‘Part B’ submission of Council.

148. We reserve our right to respond to any new issues raised through the course of the hearing in our reply submission at the close of the hearing.

ATTACHMENT A - Day 1 Amendment documents

C444ggee Council Day 1 version

--/--/----
Proposed C444ggee

SCHEDULE 48 TO CLAUSE 43.04 DEVELOPMENT PLAN OVERLAY

Shown on the planning scheme map as **DPO48**.

SOUTH EAST LARA RESIDENTIAL GROWTH AREA

1.0 Objectives

--/--/----
Proposed C444ggee

To facilitate the orderly and integrated residential development of the area.

To create a safe and integrated road network that minimises road connections on to Canterbury Road East.

To provide a shared pathway network that establishes safe and interconnected walking and cycling routes that link to nearby destinations.

To provide a liveable and sustainable urban environment inclusive of a range of lot sizes and housing types to meet diverse community needs, including affordable housing.

To promote best practice storm water management and water quality treatment measures to protect and conserve biodiversity and waterways.

2.0 Requirement before a permit is granted

--/--/----
Proposed C444ggee

A permit may be granted to use or subdivide land, construct a building or construct or carry out works before a development plan has been prepared to the satisfaction of the responsible authority.

Before granting a permit, the responsible authority must be satisfied that the permit will not prejudice the future use and integrated and orderly development of the precinct in accordance with the conditions and requirements for planning permits and requirements for a development plan in this Schedule.

3.0 Conditions and requirements for permits

--/--/----
Proposed C444ggee

The following conditions and/or requirements apply to permits:

An application for a permit listed in Clause 2.0 of this schedule must be accompanied by a report which details how the proposal will not prejudice the future preparation or implementation of a development plan.

Except for permits issued under Clause 2.0, a permit must contain conditions or requirements which give effect to the provisions and requirements of an approved Development Plan. This may include a condition requiring a Section 173 Agreement to facilitate delivery of infrastructure identified in the Staging and Infrastructure Plan.

Where a Traffic or~~&~~ Rail Noise Impact Assessment approved as part of the South East Lara Residential Growth Area Development Plan recommends any noise attenuation measures, permit conditions must give effect to the recommendations of the acoustic assessment unless a restriction on title of the relevant plan of residential subdivision is able to give effect to the recommendations of the acoustic assessment report.

Where noise attenuation measures are recommended in the approved Traffic or~~&~~ Rail Noise Impact Assessment, the permit must include a condition requiring verification by a qualified acoustic consultant that the constructed development complies with those recommendations.

Unless there is already an agreement in place between the permit applicant and the Responsible Authority that relates to the provision of affordable housing, a permit for subdivision or (where no subdivision is proposed), a permit for buildings and/or works associated with residential development should include any condition necessary to give effect to any approved Affordable Housing Delivery Strategy required by this schedule.

Any permit for the subdivision of land must include a condition that provides that, prior to the certification of the plan of subdivision, it must be demonstrated to the satisfaction of the Responsible Authority how any relevant Environmentally Sustainable Development Assessment that is approved as part of any approved Development P~~p~~lan for that land will be given effect.

Unless a contribution has already been made under any other provision of the scheme, any development of land (whether or not it is subdivided) must make an open space contribution equal to 10% of the net developable land (unencumbered) or in lieu cash payment or a combination of both subject to equalisation. Encumbered land for the purpose of the public open space contribution is land required for one or more of the following purposes:

- Drainage reserves as approved within the Integrated Water Management Plan;
- The Industrial to Residential Landscape Interface Treatment as identified in Figure 1.

Encumbered land is not to be credited for the purpose of the open space contribution.

- Rainwater tanks must be installed to all residential dwellings, plumbed to toilets, laundry and garden irrigation use, and given effect by a restriction on title of the relevant plan of subdivision or a Clause 32.08-10 buildings and works permit condition for a Residential village or Retirement village.
- A permit for subdivision of land within the catchments identified in the Stormwater Management Strategy prepared by Loetis dated 11 November 2024, must contain the following conditions and requirements, unless the Responsible Authority is satisfied that the conditions and requirements have been, or can be, satisfied by an alternative method:
  - Prior to certification of the Plan of Subdivision, an easement(s) (or widened easements) for stormwater drainage to Hovells Creek must be secured to the satisfaction of Council.
  - All costs associated with the facilitation and delivery of down-stream drainage works to Hovells Creek, including acquisition of easement land (if required) and outfall construction, shall be at the cost of the developer.

Note – this is a new provision proposed by Council to address how off-site outfall works will be managed (see SWMS p. 17, Figure 8) consistent with DPO29 and DPO46

Gas and oil pipelines:

- A permit to subdivide land, construct a building or carry out works on land identified within or adjacent to the high pressure gas pipeline as shown in Figure 2, must include a condition requiring that, prior to the commencement for works, the applicant address the interface treatment of the high pressure gas pipeline throughout the land.
- A permit to subdivide land, construct a building or carry out works on land identified within or adjacent to the measurement lengths of the Westernport Altona-Geelong Pipeline and White Oil Pipeline, as shown in Figure 2, must include a condition requiring that, prior to the commencement for works, mitigation measures identified in the High Pressure Oil Pipeline Plan be implemented to safeguard the pipelines to the satisfaction of the Minister administering the *Pipelines Act 2005*.

4.0

Proposed C444ggee

Requirements for development plan

A development plan must be generally in accordance with Figure 1 of this schedule to the satisfaction of the Responsible Authority.

Prior to the approval of any development plan, notice of the plan must be given to the pipeline licensee/operator seeking their comment on the proposed plan.

A development plan must include the following requirements:

An **Urban Design Masterplan** that includes:

- A general subdivision layout that includes the location and general distribution of lots showing a variety of lot sizes and densities to encourage a variety of housing of housing types.
- A minimum residential density of 20~~15~~ dwellings per net developable hectare across the whole development plan area.
- The location of all proposed land uses including, but not restricted to roads, open spaces and drainage reserves.
- Contours of land at 0.5-1 metre intervals.
- A development design which provides a positive identity and contributes to the amenity and safety of all surrounding roads by ensuring all development addresses these roads.
- Assessment of how the design provides for appropriate access to the adjoining DDO55 industrial land (which includes a potential District Outdoor Sports Facility generally located as shown on Figure 1).
- A pedestrian and bicycle network plan showing shared paths that are well connected to nearby destinations including adjoining residential land and the Hovells Creek Public Recreation Reserve as determined by the Road Network and Traffic Management Plan.
- A cross section for the "Industrial to Residential Landscape Interface" which provides a 3 metre landscaped verge between residential development and industrial precincts. This does not apply to areas where the park or drainage basin interfaces between the two precincts.
- Spatial identification of which areas of the land require noise attenuation measures to be implemented in accordance with the approved Traffic & Rail Noise Impact Assessment.
- Any high pressure ~~gas~~ pipeline and its associated easement must be clearly mapped and not located within a road reserve (other than road crossings) or within residential lots.
- If ~~'~~Retirement village~~'~~ or ~~'~~Residential village~~'~~ land uses are included within the development plan, the Urban Design Masterplan must include design details that:
  - Respond to and integrate with adjoining development.
  - Where lots border a public open space or public street network, provide an active frontage.
  - Promote accessibility to public transport.
  - Contribute to the permeability of the street network.
  - Provide a range of dwelling and built form types.

A **Staging and Infrastructure Delivery Plan** that shows:

- the development of the land and infrastructure required, including the staging of the drainage, open space and road infrastructure required to service the stages of development.
- ~~The plan must address~~ the delivery of any identified new or upgraded off site infrastructure required to support the development to the satisfaction of the Responsible Authority and any other relevant Authority. The railway level crossing upgrade works must be completed before the first dwelling is occupied.

An **Integrated Water Management Plan** that takes an integrated approach to flooding, stormwater and drainage management, is designed with reference to the whole of the catchment. The plan must have regard to the *Stormwater Management Strategy* *Rev06 prepared by Loetis, dated 11 November 2024*, ~~(or subsequent version)~~ and include:

Reference to:

WSUD Engineering Procedures: Stormwater CSIRO Publishing 2005.

Clause 56.07 of the Greater Geelong Planning Scheme.

The Infrastructure Design Manual and associated Design Notes.

EPA Publication 1739.1 (or subsequent version), Urban stormwater management guidelines.

An approved Avalon Airport Wildlife Hazard Report.

A Drainage Strategy that addresses:

- Drainage Feasibility.
- Stormwater Quality Management.
- Peak Discharge Management.
- Potential impacts of the overall volume of stormwater on downstream land.
- Functional Peak Flood Level Determination.

Identification of all land to be set aside for drainage purposes, detailing the approximate size and location of all drainage reserves and system components, including wetlands, rain gardens and retarding basins to meet peak discharge limits and WSUD elements to meet Best Practice Environmental Management Guidelines.

A Stormwater Management System that:

Ensures peak discharge rates and pollutant loads of all stormwater leaving the site post development are no greater than pre-development.

Ensures no adverse impacts to any surrounding area, upstream or downstream, including the saline dependent floodplain values of Hovells Creek and the Port Phillip Bay (Western Shoreline) and Bellarine Peninsula Ramsar site.

Consideration of development staging.

- Consultation with the Head, Transport for Victoria as it relates to the Princes Freeway.

An **Avalon Airport Wildlife Hazard Report** that has regard to the National Airports Safeguarding Framework and associated guideline and is conducted by a suitably qualified wildlife hazard expert. The report must assess any water basin, wetlands or potential wildlife attractants proposed by a Integrated Water Management Strategy to manage the risk of wildlife strikes in the vicinity of Avalon Airport.

A **Road Network and Traffic Management Plan** that has regard to the *Transport~~ffic~~ Impact Assessment G37968R-01A~~G33105R-03B~~ prepared by Traffix Group dated March~~November~~ 2026~~4~~* and includes:

An internal road network with a high level of access for all vehicular and non-vehicular traffic and which responds to the topography. Provide key local streets (bus-capable with shared path) to and from Canterbury Road East to the local park.

- Details of all necessary upgrades to the surrounding road network to urban standards including any required upgraded intersection treatments ~~or level crossings~~ informed by a Transport~~ffic~~ Impact Assessment.
- Details of the Canterbury Road East railway level crossing upgrade including:
  - an active pedestrian crossing with automatic gates and latched egress escape gates
  - wing and corridor fencing to prevent users from easily bypassing the pedestrian crossing.
- Identification of any land required for the future upgrade of the Canterbury Road East railway level crossing.

Identification of locations where separate paths for pedestrians and cyclists are required to connect to the wider movement network including:

- along the south side of Canterbury Road East

- along the south side of Canterbury Road East, west of the railway level crossing to Blackbird Circuit.
- from or near the intersection of Canterbury Road East and Rennie Street to the Hovells Creek Trail. The connection must provide for the safe, controlled crossing of Rennie Street.

The provisions of safe egress routes during a 1% AEP flood event.

An **Open Space and Landscape Masterplan** that includes:

The provision of a park to have an area not less than 1 hectare located and configured generally as shown in Figure 1 with the surrounding context.

A requirement to provide a tree canopy plan at the planning permit stage that meets the minimum tree canopy target of 30~~25~~% ~~contained in the *City of Greater Geelong Urban Forestry Strategy 2015-2025*~~ and which stipulates the number and type of trees to be delivered.

Concept plans should show the general layout and indicative landscape treatments (such as paths, seating, lighting, shading structure, play spaces ad paving materials) in accordance with Council infrastructure standards, and the use of local indigenous plant species where appropriate.

Consideration for the potential future District Outdoor Sports Facility.

A **Traffic or~~and~~ Rail Noise Impact Assessment** prepared by a suitably qualified acoustic engineer or other suitably qualified person to the satisfaction of the Responsible Authority, and the Head, Transport for Victoria which:

Applies the following noise objectives:

- Not greater than 35 dB LAeq,8h when measured within a sleeping area between 10 pm and 6 am (for road noise).
- Not greater than 40 dB LAeq,16h when measured within a living area between 6 am and 10 pm (for road noise).
- Not greater than 55 dB Lamax when measured within a sleeping area between 10 pm and 6 am (for rail noise).

Assesses noise levels:

- considering the cumulative noise impacting on the proposal including rail noise or~~,~~ road traffic noise as appropriate.
- in unfurnished rooms with a finished floor and the windows closed and be based on average external noise levels measured as part of a noise level assessment.

~~For areas other than sleeping and living areas, adopts the median value of the range of recommended design sound levels of Australian Standard AS/NZ 2107:2016 (Acoustics – Recommended design sound level and reverberation times for building interiors).~~

Includes recommendations for any noise attenuation measures required to meet the applicable noise level objectives, based on the following hierarchy that prioritises measures that benefit both outdoor and indoor areas of sensitive land uses:

- noise barriers, preferably as close as practicable to the noise source(s), and then;
- noise compatible design for buildings, with siting, orientation and internal layout, to be considered prior to setting building envelope performance requirements.

Specifies:

- that the manner by which the Traffic and Rail Noise Impact Assessment is to be implemented should be by way of a signed agreement made between the landowner, the Head, Transport for Victoria and the Responsible Authority under Section 173 of the Planning and Environment Act
- appropriate noise attenuation measures that can be included within the Section 173

conditions~~Memorandum of Common Provisions~~

~~Identifies~~ which areas of the Site (or which lots) require noise attenuation measures to be implemented by the Section 173 Agreement~~within the Memorandum of Common Provisions~~.

Which Assessment to prepare will be determined as follows:

- a Traffic Noise Impact Assessment within 250 metres of the nearest trafficable lane of the Princes Highway
- a Rail Noise Impact Assessment within 180 metres of the centre of the nearest VLine track.

High Pressure Gas Pipeline Plan

Where development is proposed within the Area of Consequence~~measurement length~~ of a high pressure gas pipeline ~~easement~~ as shown in Figure 2, ~~the development plan~~ a Plan must be prepared that:

Identifies~~y~~ the location and extent of the easement, and the Area of Consequence.

Is~~Be~~ accompanied by a Safety Management Study (SMS) in accordance with AS 2885.

Ensures that the only land use provided for within the Area of Consequence is Dwelling (at less than 50 dwellings per hectare)~~sensitive uses are avoided or mitigated through appropriate siting and design measures~~.

- Ensures that the Pipeline Licensee is engaged in the preparation of the High Pressure Gas Pipeline Plan and further consulted before the Development Plan is approved.

High Pressure Oil Pipeline Plan

Where development is proposed within the Measurement Length of a high pressure oil pipeline subject to the Pipelines Act as shown in Figure 2, a Plan must be prepared that:

Identifies the location and extent of the easement, and the Measurement Length.

Is accompanied by a Safety Management Study (SMS) in accordance with *Australian Standard 2885 Pipelines – Gas and liquid petroleum* as required.

Ensures that sensitive uses are avoided or mitigated through appropriate siting and design measures.

- Provides details of how all foreseeable threats to the pipeline are identified and managed through protection measures in accordance with safety obligations of the *Australian Standard 2885 Pipelines – Gas and liquid petroleum*
- Has engaged with the Pipeline Licensee in the preparation of the Plan.

An **Affordable Housing Delivery Strategy** that includes:

The provision of affordable housing that is equal to the value of 5% of the total number of serviced lots proposed to be provided at a discount of 20% to market value, as determined by an appropriately qualified expert. This is referred to as the **Primary Obligation**.

The Primary Obligation may be delivered as:

- A monetary contribution to the City of Greater Geelong Affordable Housing Trust or another Housing Agency nominated by Council which is of equal value (as independently assessed) to the Primary Obligation; or
- A provision of completed dwellings for nil consideration which in total have the same monetary value as the Primary Obligation as independently assessed; or
- Any other delivery model of the contribution which is of equal value to the Primary Obligation.

The strategy should demonstrate how it responds to local housing need and have regard to any relevant Ministerial Notice made under Section 3AA(2) of the Planning and Environment Act

1987.

The method of securing the implementation of the Affordable Housing Delivery Strategy, and the manner by which it is to be implemented should be by way of an agreement made between the landowner and the responsible authority under Section 173 of the Planning and Environment Act 1987.

Any requirement in this schedule for a development plan to include an Affordable Housing Delivery Strategy does not apply:

- where any other provision of the Greater Geelong Planning Scheme, or the Planning and Environment Act 1987 (or any other Act), requires an affordable housing contribution to be made in respect of the residential development of the land.
- to land in respect of which an agreement with the Responsible Authority has already been entered into for the provision of affordable housing.

An **Environmental Management Plan** ensuring impacts to fauna including the Australasian bittern are minimised.

An **Environmentally Sustainable Development (ESD) Assessment** that includes:

An assessment of the nature of the proposed development, and the site conditions which present opportunities or constraints for achieving sustainable design outcomes.

A framework which identifies how the use and development of the land can achieve ESD outcomes in accordance with any relevant policies and strategies developed by the City of Greater Geelong and the Victorian Government.

Track changes are in BLUE (insert) and RED (delete)

Highlights

Light blue - BW

Yellow - VIVA

Grey - APA

Green - DTP

No colour - Council

Figure 1: South East Lara Residential Growth Area Framework Plan

DELETE

INSERT

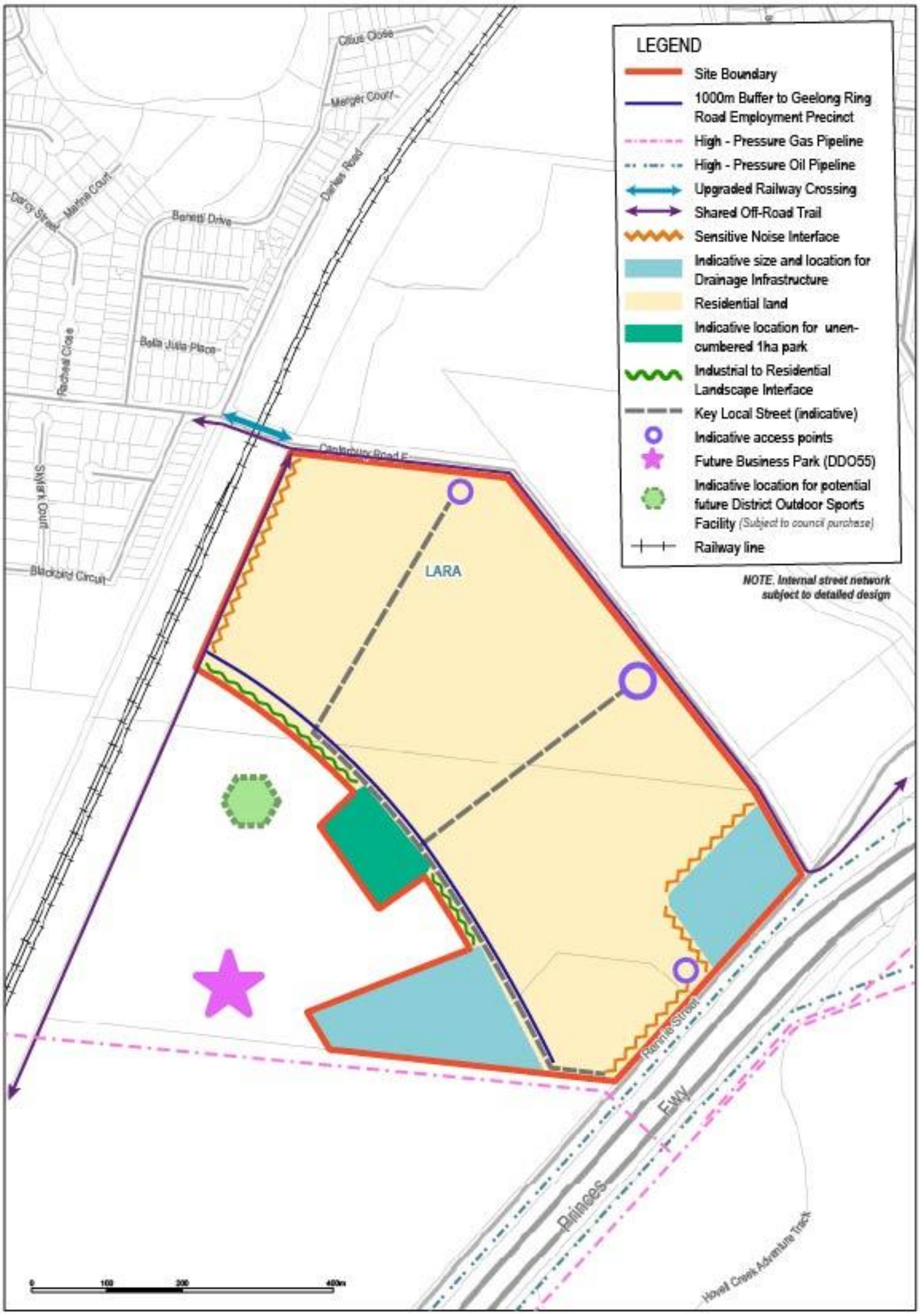
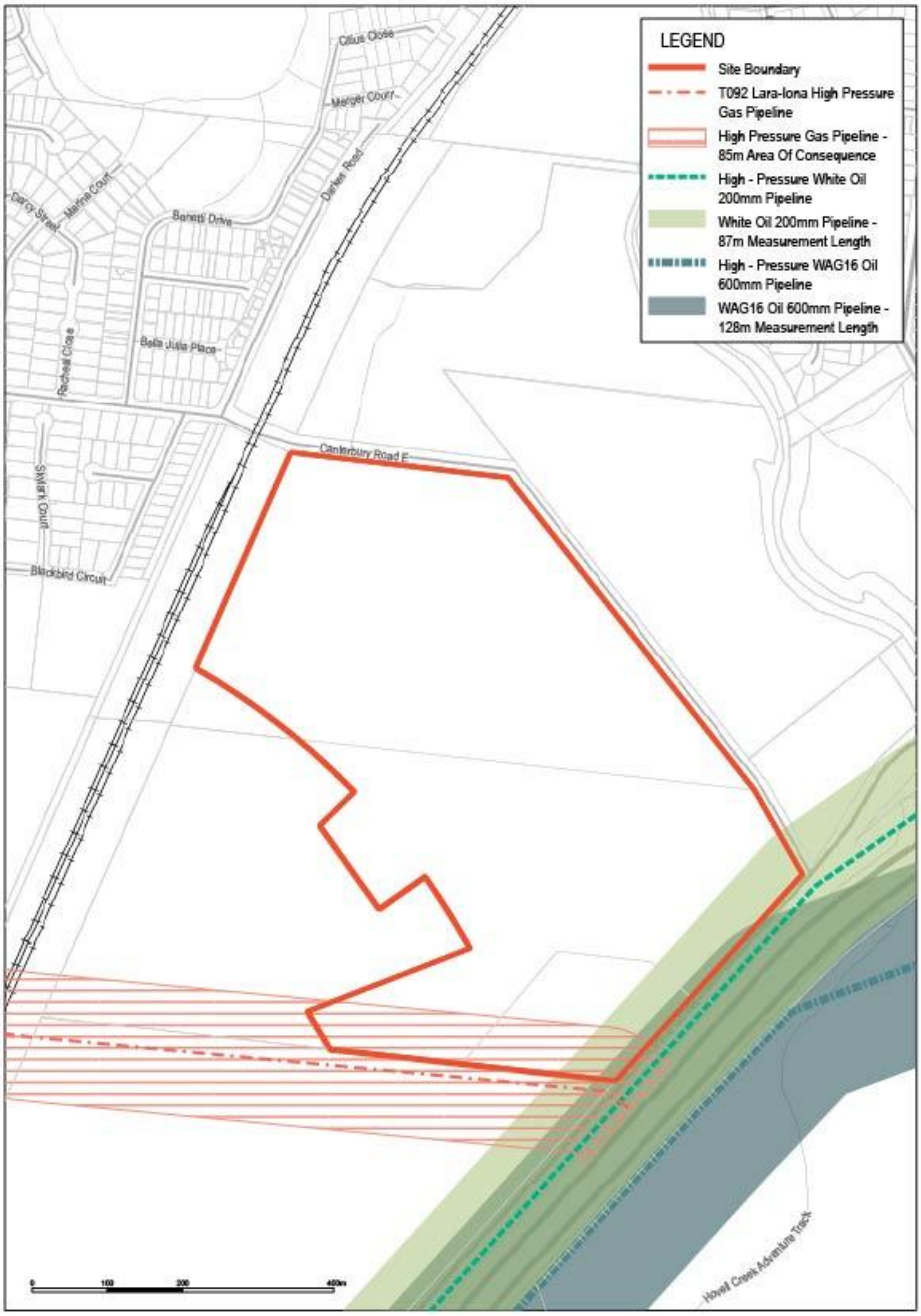

LEGEND
Site Boundary
1000m Buffer to Geelong Ring Road Employment Precinct
High - Pressure Gas Pipeline
High - Pressure Oil Pipeline
Upgraded Railway Crossing
Shared Off-Road Trail
Sensitive Noise Interface
Indicative size and location for Drainage Infrastructure
Residential land
Indicative location for unencumbered 1ha park
Industrial to Residential Landscape Interface
Key Local Street (indicative)
Indicative access points
Future Business Park (DDO55)
Indicative location for potential future District Outdoor Sports Facility (Subject to council purchase)
Railway line
NOTE. Internal street network subject to detailed design
LARA
Canterbury Road E
Princes Fwy
Rennie Street
Darcy Street
Marina Court
Bennett Drive
Bella Julia Place
Rachael Close
Skylark Court
Blackbird Circuit
Dalton Road
Citrus Close
Hovell Creek Adventure Track

Figure 2: South East Lara Residential Growth Area High Pressure Pipeline Plan



C453ggee Council Day 1 version

SCHEDULE 55 TO CLAUSE 43.02 DESIGN AND DEVELOPMENT OVERLAY

Shown on the planning scheme map as **DDO55**

LARA BUSINESS PARK

1.0

--/--/----
Proposed C453ggee

Design objectives

To facilitate commercial and industrial development that is efficient, functional and meets changing market demands.

To ensure development achieves a high-quality, site responsive design that enhances visual amenity from major transport routes and surrounding non industrial land.

To ensure landscaping enhances the environmental and rural characteristics of Lara.

To achieve~~promote~~ best practice stormwater quality, management and reuse measures that protect, and conserve biodiversity and waterway values of the Ramsar Wetlands and Hovells Creek.

2.0 Buildings and works

A permit is required to construct a fence where the fence is located along a boundary that has a frontage to a street and is:

Visually impermeable and greater than 1.5 metres in height above natural ground level; or

Constructed of unpainted galvanised steel or uncoated wire.

Buildings and works should meet the following requirements:

Site Layout & Design

Buildings should address the street frontage by including the following elements in the design;

Facade treatments that include design elements that add visual interest.

Locating office components in a visible location at the front of the building. Incorporating facades that address both frontages where the site is located on a corner. Clearly delineated visitor access points to the building.

Buildings should provide a variation of massing, building materials, finishes and colours to avoid visual bulk.

Building roofs should use lighter coloured materials and finishes.

Sites adjoining Rennie Street should provide a design response that achieves positive visual amenity including landscaping and canopy trees when viewed from the Princes Freeway.

Buildings, works, plant and machinery should be constructed, housed and maintained in a manner that minimises the visual impact.

Discourage large expanses of facades along the rail corridor that are painted in signal colours, or signs with signal shapes and signal colours.

Discourage extensive lighting along the rail corridor to avoid negative impacts on train drivers.

Car parking and Access

Avoid potential conflict between pedestrian and vehicle movements including through provision of pedestrian links through car parking areas.

Car parking should be provided at the front of the site.

All vehicle crossings, accessways and parking areas should be sealed with an all weather coat.

Lighting should be provided to car parking areas where relevant.

If more than 10 car spaces are provided the design should incorporate landscaped island beds to break up the hard surface area and improve visual amenity.

Landscaping

The front setback should be landscaped with one canopy tree and vegetation, and where practical, integrate water sensitive urban design principles.

Landscaped island beds in car parks should include trees to provide shade to achieve a 30% canopy target for all car parks.

Landscap~~e~~~~ing~~ buffers of at least 5 metres wide should be provided along boundaries which adjoin a sensitive land use or environmental feature (such as outdoor recreation facility or reserve).

Landscaping areas should be designed to be low maintenance, including selection of hardy landscape species that require minimal ongoing maintenance and have low water usage. Where practical and consistent with this requirement, landscaping species should be locally indigenous or native.

Landscaping should meet the State Policy minimum tree canopy target of 30~~25~~% ~~contained in the *City of Greater Geelong Urban Forest Strategy* 2015-2025~~.

Landscaped areas should be protected from vehicle damage by incorporating protective design features.

Any landscaping over a high pressure pipeline or within an associated easement must consider the operational safety of the pipeline and be to the satisfaction of the P~~p~~ipeline Licensee~~operator~~.

The quality and quantity of landscaping should reflect the scale of the building and car park area to provide screening and softening of visual bulk.

Avoid the planting of trees adjacent to the rail corridor where it may adversely affect rail infrastructure.

Signs

Signs should be co-located on sites which have more than one tenant where reasonably practicable to avoid sign clutter.

Stormwater Quality and Re-Use

Best practice storm water quality and reuse measures, including rain gardens, should be encouraged as part of the design for larger developments and on sites where it is practical to implement.

Loading bays should be covered, active work areas should be contained internally within buildings and waste disposal areas should be appropriately located to reduce the potential for ~~contaiminated~~contaminated runoff.

Fences

Front and side fences should be of quality materials and colours that complement the building and surrounding area and be visually permeable.

Wherever possible, fencing should be softened and screened by vegetation planting.

Fences to a minimum height of 1.8 metres should be provided adjacent to the rail corridor to prevent trespass.

3.0
--/--/----
Proposed C453ggee

Subdivision

A permit to subdivide land must meet the following requirements:

General

Subdivision should provide:

- lot sizes and designs that meet market demands.
- road reserves that deliver ~~appropriate~~ street tree planting.
- frontingedge roads ~~adjacent~~ to all drainage and open space reserves.

If subdivision and development require the delivery of any off-site infrastructure, a permit condition or a Section 173 Agreement should be used to facilitate delivery of the infrastructure.

Subdivision sequencing should generally support the efficient delivery of service infrastructure and road connections and support early delivery of public and active transport infrastructure.

~~Subdivision should provide for road frontage to any directly adjoining open space.~~

Unless located in a reserve, subdivision must locate a high pressure pipeline easement within the frontage of industrial lots where carparking and landscaping is proposed.

Subdivision design should allow for the appropriate integration and connectivity to the potential District Outdoor Sport Facility (generally located as shown on Map 1) to the satisfaction of the responsible authority.

Stormwater Management

Subdivision must be informed by a Stormwater Management Plan and should set aside land for drainage purposes to meet peak discharge limits and water sensitive urban design elements in accordance with performance objectives of the Urban Stormwater: Best Practice Environmental Management Guidelines (CSIRO, 1999), the Infrastructure Design Manual~~,~~ and CoGG Design Notes.

The Stormwater Management Plan must be developed in consultation with the Head, Transport for Victoria as it relates to the use of culverts under the Princes Freeway.

The design of retarding basins should:

Have sufficient land area set aside for heavy vehicle access and sediment drying, and measures to mitigate mosquito breeding in accordance with best practice guidelines.

Consider any wildlife hazard assessments to mitigate the risks of wildlife strikes in the vicinity of Avalon Airport.

Be sited generally in accordance with Map 1. The location of retarding basins immediately adjacent to the rail corridor is discouraged.

A Stormwater Management System should have regard to the *Loetis Stormwater Management Strategy, Lara Farms – Rennie St Lara Rev 06, November 2024* and be designed having regard to EPA Publication 1739.1, Urban Stormwater Management Guidelines, to ensure that:

peak discharge rates of all stormwater leaving the site post development are no greater than pre-development rates and the overall volume of outfall stormwater is reduced to the extent reasonably practicable.

no unreasonable adverse impacts to any surrounding and downstream land, including the saline dependent floodplains of Hovells Creek, and the Port Phillip Bay (Western Shoreline) and Bellarine Peninsula Ramsar site.

Traffic and Pedestrian Movements

Subdivision design should provide a movement network that:

has regard to the *Transport Impact Assessment G37968R-01A prepared by Traffix Group dated March 2026*~~*Traffic Impact Assessment – Proposed Rezoning by Ratio (705-765 Princes Highway, 710 Rennie Stret & 76-156 Canterbury Road East, Lara) – dated 31 October 2024* or an alternative Traffic Impact Assessment approved by the Responsible Authority~~.

minimises the number of road crossings of the high pressure gas pipeline and ensure they are at 90 degrees to the pipeline.

promotes a high degree of internal permeability including a network of bus-capable roads and the provision of at least two entry roads off Rennie Street.

- upgrades Rennie Street to a standard that:
  - is bus-capable
  - includes a shared path on the development side
  - implements measures to dissuade car parking on the southern side grass verge.

prevents Business Park vehicle connections to the future DPO48 residential land to the north.

delivers road widths and cross-sections that are suitable for industrial vehicle movements and consistent with the Infrastructure Design Manual.

provides an integrated network of safe, well-lit and convenient footpaths on both sides of every street.

provides shared pathways to facilitate future active transport connections between the future DPO48 residential area and park, as well as connecting the business park to the surrounding shared trail network, particularly the Hovells Creek Shared Path and any future shared path ~~and/or bike~~

~~lane~~ along Canterbury Road East.

Exemption of notice and review

An application to subdivide land is exempt from the notice requirements of section 52(1)(a), (b) and (d), the decision requirements of section 64(1), (2) and (3) and the review rights of section 82(1) of the Act.

4.0 Signs

--/--/----
Proposed C453ggee

None specified.

5.0 Application requirements

--/--/----
Proposed C453ggee

The following application requirements apply to an application for a permit under Clause 43.02, in addition to those specified elsewhere in the scheme and must accompany an application, as appropriate, to the satisfaction of the responsible authority:

A design response which provides a detailed design statement including an assessment of how the proposed development responds to the requirements outlined in Clause 2.0.

- A Stormwater Volume Management Strategy that assesses how stormwater volume leaving the land can be reduced to the extent reasonably practical (under EPA Publication 1739.1) and includes:
  - Targets for volume reduction, informed by the downstream Limeburners Bay Ramsar biodiversity values.
  - Volume reduction measures to be integrated into the detailed design of the subdivision and incorporated into lots.
  - Measures proposed within reserves created as part of the subdivision.

A Safety Management Study (SMS) led by the P~~p~~ipeline L~~l~~icensee is required for a permit

within the M~~m~~easurement L~~l~~ength or Area of Consequence of any	High Pressure Pipeline shown on Map 2 to the satisfaction of the Responsible Authority. The application must include details of any necessary protective works resulting from the SMS following engagement with the Pipeline Licensee. This application requirement does not apply to alterations or additions to an existing building where the alterations or additions are within the building footprint or for minor buildings and works at the discretion of the responsible authority.

Decision guidelines

The following decision guidelines apply to an application for a permit under Clause 43.02, in addition to those specified in Clause 43.02 and elsewhere in the scheme which must be considered, as appropriate, by the responsible authority:

- The design and siting of existing development in the area.
- Whether there are any adverse impacts to Hovells Creek, and the Port Phillip Bay (Western Shoreline) and Bellarine Peninsula Ramsar site.
- Whether the design and landscaping of the site contributes to the amenity of ~~The interface with~~ adjoining uses~~zones~~, rail corridor, Rennie Street and Princess Highway.
- The appearance of the site when viewed from major transport routes and surrounding non-industrial land uses.
- Whether the subdivision design is generally in accordance with the Lara Business Park Outline Development Plan.

Track changes are in BLUE (insert) and RED (delete)

Highlights

Light blue - BW

Yellow - VIVA & APA

Grey - Submitter 13

Green - DTP

No colour - Council

Map 1 - Lara Business Park Outline Development Plan

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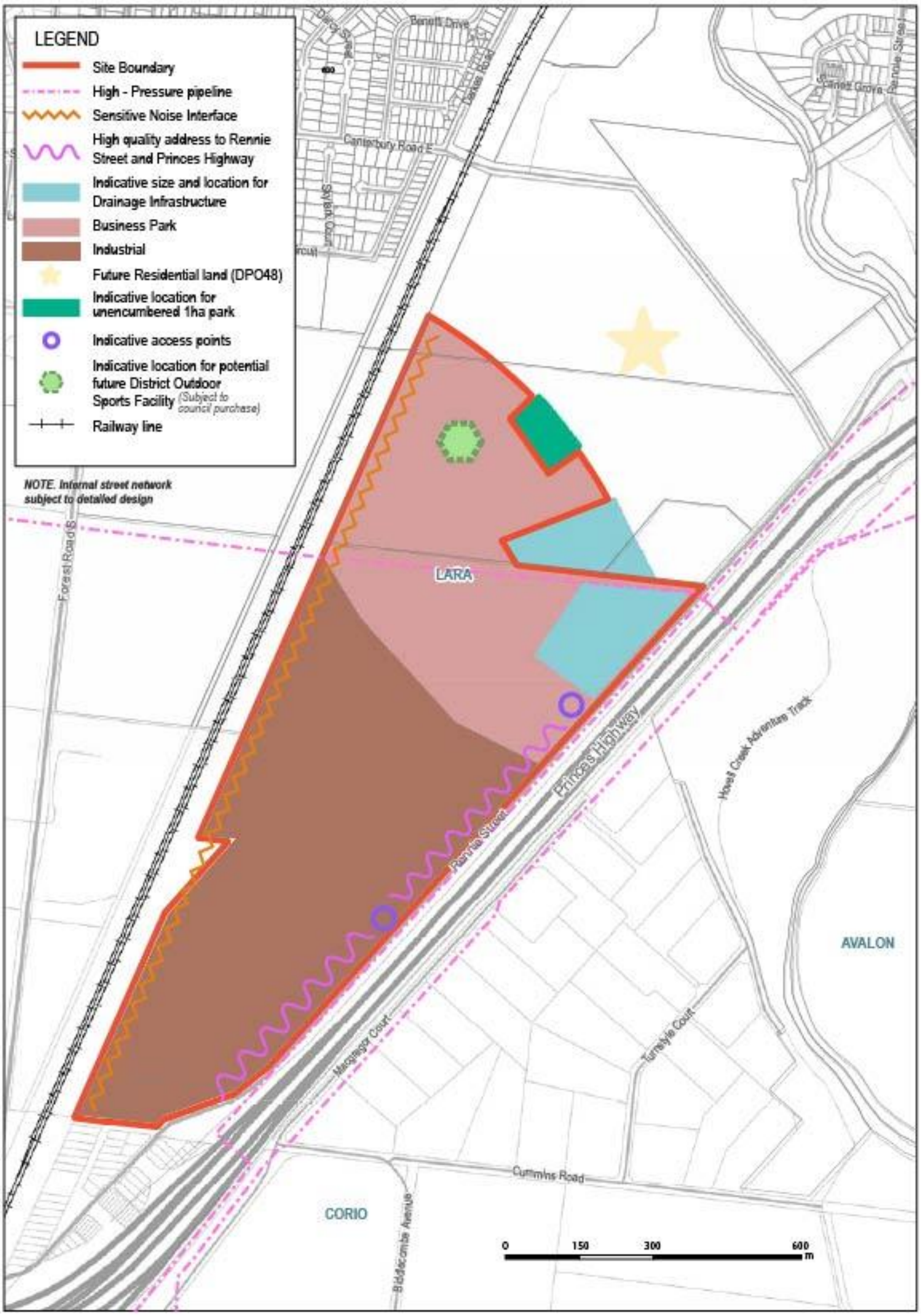

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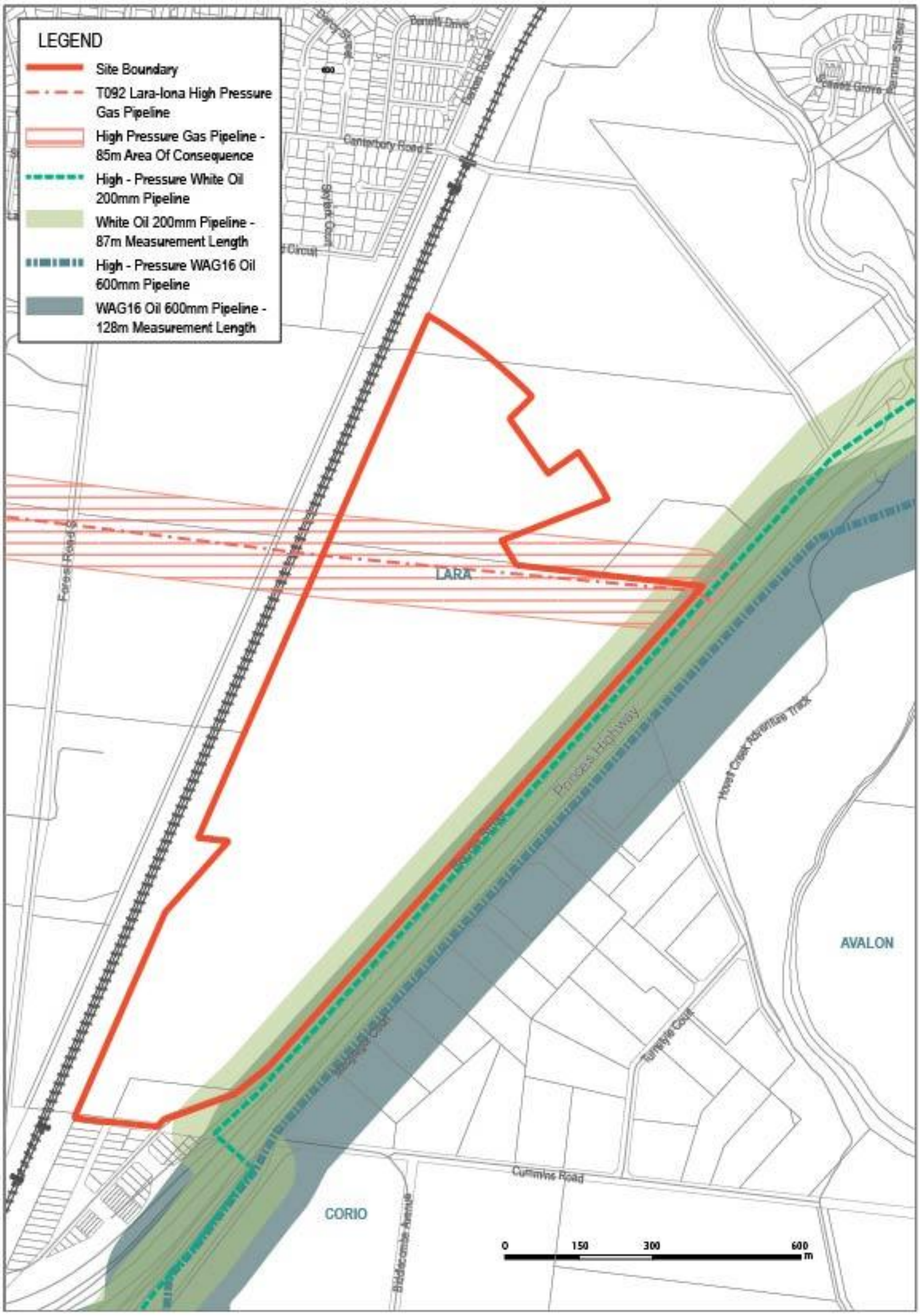
Map 2 - Lara Business Park High Pressure Pipeline Plan



ATTACHMENT B - Rennie St Culvert Report (extract)

1. Introduction

pitt&sherry was engaged by the City of Greater Geelong to undertake a Level 3 investigation of the pipe culvert on Rennie Street over Hovells Creek in Lara. The Council have requested an investigation of the structure as it is subject to yearly flooding and has had a load limit (10 tonne gross) vehicle restriction on it for an unknown reason. Council is seeking to understand if a load limit on the structure is required. Available records on CUN47 supplied by Council include design plans and a 2021 Level 2 inspection report.

2. Structure Description

The pipe culvert is located at Rennie Street over Hovells Creek (-38.038652, 144.412780). A load limit of 10 tonne gross is currently posted on the road prior to the structure. The supplied drawings (refer Appendix A) state that structure comprises a 1.5m diameter Class 2 pipe. Due to the structure being completely submerged the dimensions of the structure could not be confirmed. By prodding the downstream pipe culvert entrance and river bed with a pole the inspectors estimate that the pipe culvert could be as small as 300mm diameter with the river bed less than 500mm from the top of the headwall. It appears that the supplied drawings are not representative of the structure.

The total length of the pipe (measured from the edge of the upstream road) is approximately 14.7m. The road is sealed with asphalt and has a traffic width of approximately 6.2 metres. A concrete headwall 2 meters wide and 5 metres long was identified at the downstream end of the structure, but due to the upstream end of the structure being entirely submerged the head wall shown in the drawings could not be identified. The downstream end of the structure has rock beaching.

General views of the structure are provided in Figure 1 to Figure 3. In this report, approach 1 is the western approach.

Figure 1: View of the structure from road

Figure 2: Upstream view of the structure

Figure 3: Downstream view of the structure

3. Site Inspection

3.1 General

A visual inspection of the structure was carried out by Ben Gu and Juan David Pena of pitt&sherry on 20 June 2022. The weather at the time of inspection was sunny with a temperature of approximately 12 degrees Celsius. Observations were made from locations safely accessible on foot and photographic images were captured using high resolution digital cameras. The pipe culvert was found to be completely submerged with only the downstream headwall visible for inspection. Internal images of the pipes were unable to be obtained due to the turbidity of the water.

During the inspection, a local resident stopped and commented that the road floods regularly and that the mangroves downstream of the structure do not receive much water.

3.2 Observations

The following observations were made on site:

- The pipe culvert is entirely submerged with only the downstream headwall visible; this indicates that the flow is choked and that the structure is most likely not appropriate for the level of water flow. The water level upstream is at a higher elevation than the water downstream (Figure 4, Figure 5)
- The asphalt surface has cracking with an affected length of approximately 20m from approach 1 (Figure 6)
- Minor spalling to the kerb on approach 1 (Figure 7)
- Concrete spall to kerb above downstream headwall (Figure 8)

Figure 4: Pipe culvert upstream including headwall is entirely submerged and not visible

Figure 5: Pipe culvert downstream is entirely submerged with only the headwall visible

Figure 6: Cracking to asphalt surface approximate 20m of length affected

Figure 7: Minor spalling to the kerb on approach 1 left hand side

Figure 8: Minor spalling to kerb above the downstream headwall

4. Barrier Risk Assessment

A barrier risk assessment was conducted using the AS5100.1(2017) chart-based selection methodology for barrier performance level.

Utilising weekly vehicle counts survey data (2009, refer to Appendix B) with AADT (Average Annual Daily Traffic) of 1933 vehicles per day (vpd) and assuming a compounding yearly growth rate of 2% this results in AADT for the year 2022 of 2500 vpd. Multiplying the AADT with adjustment factors in AS5100.1 the adjusted AADT is 3751 vpd. The road design speed was taken as 60km/hr. The chart-based risk assessment methodology yielded that the performance required on the structure is a low-level performance barrier (refer to Appendix C).

5. Load Assessment

Council provided design drawings for the structure that show a single 1.5m Diameter Class 2 pipe culvert under Rennie Street. Due to the structure being completely submerged we could not confirm the drawing details on site; therefore, it is unclear if the drawings provided by the Council are representative of as-built details. Although the drawings may not be representative of the structure, pitt&sherry has performed a desktop load assessment based on the drawing details and therefore the results may not be applicable.

Precast concrete pipes are currently designed based on AS/NZS 4058:2007 Precast Concrete Pipes (Pressure and Non-Pressure). The standard specifies test loads for various pipe diameters and load classes. Assuming DN1500 pipe were installed, the proof load for DN1500 pipe ranges from 54kN/m (Class 2) to 162kN/m (Class 4).

The load carrying capacity of a buried concrete pipe also depends on uniform bedding support and sound foundation, the exact details of which are unknown for this structure. To gain an understanding of the type of concrete pipe that may be required for this application pitt&sherry has undertaken a preliminary assessment using the design software PipeClass v2.0.

Based on year of construction it is expected that the structure has been designed for T44 design loading (including A14 design axle load), and this loading would be more severe than any current GML or HML vehicle loading. Based on the civil section of the drawings approximately 2000mm of fill over the pipe over the roadway, with positive projection embankment condition and Type H2 support, the design software indicates that a Class 2 pipe would be 96% utilised by the A160 design axle load. This design load, specified in AS5100 Bridge Design, represents an axle of approximately 16 tonnes. The results suggest that a Class 2 pipe could support the complete A160 axle load of approximately 16 tonnes. By comparison, the heaviest single axle of a 42.5T General Mass Limit (GML) semi-trailer is slightly more than 8 tonnes, while the rear axle of a 15.0T GML truck is 9 tonnes.

The above assessment does not depend on vehicle load distribution through soil fill, as the majority of the vertical load on the pipe culvert is generated by the weight of the soil fill. This assessment indicates that a DN1500 class 2 pipe has sufficient capacity to undertake GML and HML vehicle loading. However, it is unclear if the drawings provided by the Council are representative of as-built details and thus the existing load limit must be retained as there is no information at the moment to conclude why the load limit was put in the first place, nor any justification for changing it.

6. Discussion

The structure was built in 1996 according to the drawings supplied by the Council. The structural condition of the pipe culvert is unknown due to the structure being entirely submerged at the time of inspection.

It is important to note that it is difficult to assess the capacity and condition of the structure due to the pipe being entirely submerged with only the downstream headwall being visible. It is unclear if the design drawings provided by the Council are representative of the as-built details. From reviewing the drawings, the direction of north relative to Rennie Street is incorrect as Rennie street is perpendicular to North and not parallel to it, however the more specific details such as the geometric properties of the pipe culvert were unable to be ascertained.

It is recommended for Council to investigate the feasibility of dewatering the site so that a visual inspection of the pipes can take place. Until the condition and geometric properties of the pipes can be ascertained it is recommended that the load limit of the structure remain in place. There is currently insufficient information to conclude why the limit was placed in the first place, nor justification for removing the limit.

It is recommended for Council to consider conducting a hydraulic assessment to determine if the structure is adequately servicing Hovells Creek. Points to evaluate are the difference in water level upstream to downstream; the frequency of road closures due to overtopping; maintenance costs of the existing structure; environmental effects on the vegetation downstream of the structure. Moreover the community and environmental benefit of replacing the existing culvert with a major culvert with adequate water flow should also be considered in this assessment.

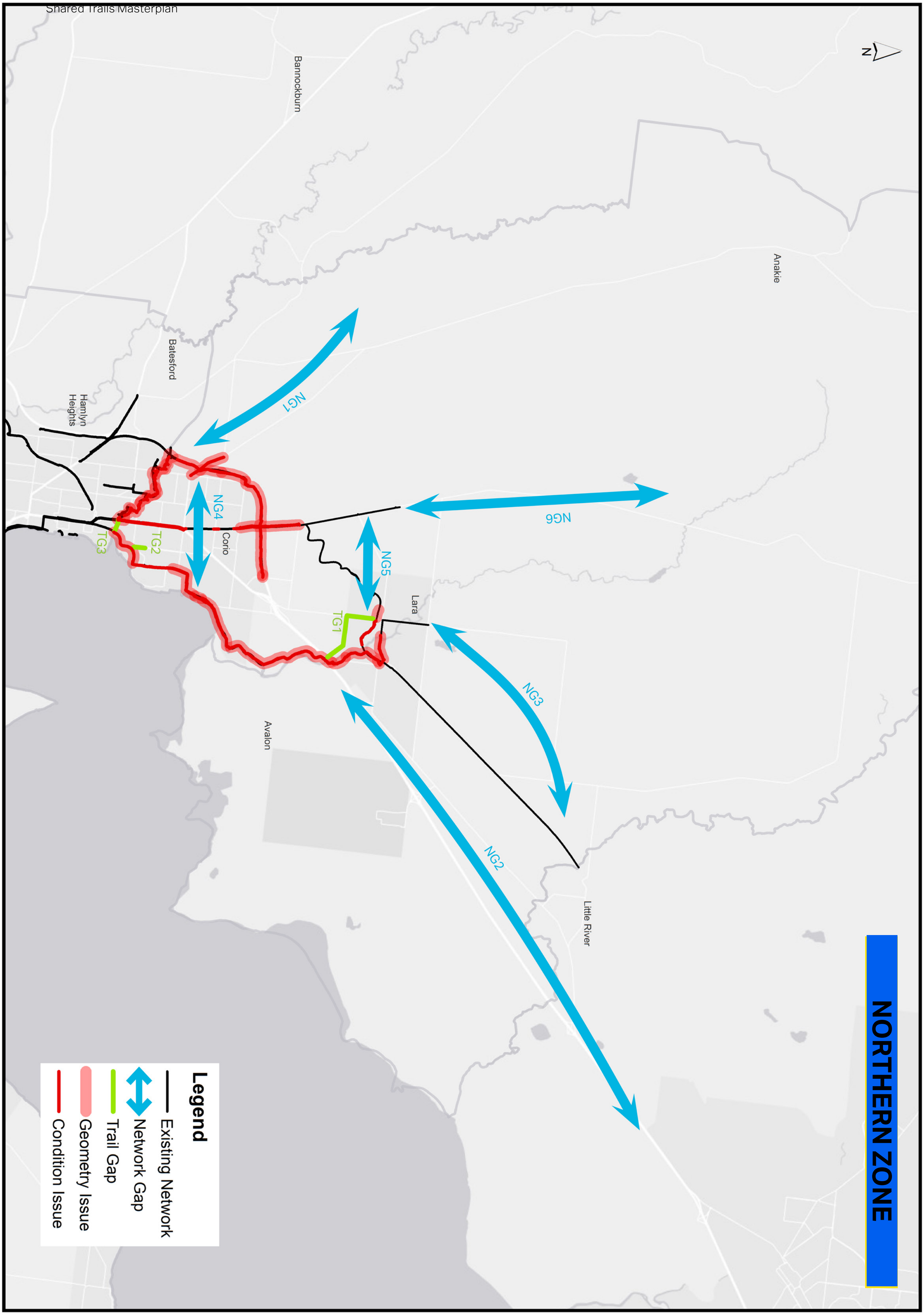
Rennie Street pipe culvert at present time has no barriers. The barrier risk assessment in section 4 determined that the minimum required barrier is a low-level performance. Council should conduct a network wide barrier assessment to determine the most urgent structures which require barrier replacements/upgrades as part of the Council's resource allocation strategy.

7. Recommendations

Based on the condition of the structure and limited assessment of the load carrying capacity the following recommendations are made to Council regarding management of this asset:

- Council should investigate the feasibility of dewatering the site in order to perform a visual inspection of the pipe(s) to take place. Until the structure is dewatered the existing load limit should be retained as there is not sufficient information to conclude why the load limit was placed in the first place, nor justification for changing it.
- Conduct a network wide barrier risk assessment to determine if Rennie St over Hovells CK culvert barriers are a priority. It is advised to install compliant low performance barriers as per AS5100.1 (2017) since the structure currently has no barriers, subject to consideration of site flooding
- Ensure that the structure is not blocked and water drains from the creek freely through the pipe culvert into Hovells Creek and undertake a proper action on removing debris if the waterway is blocked.
- Monitor the spall in the concrete headwalls and downstream drop structure as part of routine inspections
- Determine if the hydraulic capacity of the existing structure provides an acceptable level of service with respect to flood immunity. If it does, and the existing pipes are damaged, then plan to replace the pipes like for like (with appropriate pipe load class). If it does not, then develop plans to replace the structure with an alternative (e.g. bridge or major culvert); and
- Until such time that major rehabilitation or replacement works are carried out, perform regular inspections and maintenance as required to ensure that the road/structure provides an acceptable level of service.

ATTACHMENT C - CoGG Shared Trails Plan (extract)


NORTHERN ZONE
N
Bannockburn
Batesford
Hamlyn Heights
Anakie
Corio
Lara
Avalon
Little River
NG1
NG2
NG3
NG4
NG5
NG6
TG1
TG2
TG3
Legend
Existing Network
Network Gap
Trail Gap
Geometry Issue
Condition Issue

ATTACHMENT D - Lara Farms Flood Impact Report

Venant Solutions Pty Ltd

Office 704, 222 Hoddle Street
Abbotsford VIC 3067

PO Box 877
Macleod VIC 3085

Ph: 03 9089 6700
ABN: 15 166 193 219

www.venantsolutions.com.au

Our Ref: L.M00441.01.00_FIA.docx

14 June 2024

Lara Farms Pty Ltd
Level 1, 2-6 Myers Street
Geelong VIC 3220

Attention:

Dear

RE: LARA FARMS – FLOOD IMPACT REPORT

Lara Farms Pty Ltd is proposing the rezoning of 76-156 Canterbury Road East (SPI 3C-15B\PP5452), 785-805 Princes Highway (SPI 1\TP156147), 705-765 Princes Highway, Lara (SPI 2\LP98249) and 610 Rennie Street (SPI 1\LP98249) (the Site) for the purposes of residential and industrial/commercial subdivisions. The Site is shown in Figure 1.

The City of Greater Geelong (CoGG) Design Notes require a flood impact report for all rezoning applications within or adjacent to any known or likely flood-prone areas. The flood impact assessment report considers riverine flooding and is separate from a drainage feasibility report (stormwater management strategy), also required by the Design Notes, which considers local catchment runoff. This letter documents the flood impact assessment for the Site.

The Site is adjacent to Hovells Creek. The following flood mapping was sourced:

1. Figure 2 shows the planning scheme flood overlays[1]:
    a. There is a Flood Overlay (FO) covering Hovells Creek and the floodplain adjacent to the Site, but it does not extend into the Site.
2. Figure 3 shows the Corangamite Catchment Management Authority's 1% AEP (annual exceedance probability) flood extent[2] which is based on the CoGG 2020 Lara Flood Study:
    a. The flood extent does not encroach onto the Site.
    b. The flood extent is closest to the Site in the southeast corner at the intersection of Rennie Street and Canterbury Road East.
    c. At this location the 1% AEP flood level is 4.8 m AHD. The minimum ground level in the southeast corner from site feature survey is 5.8 m AHD, which is 1 m above the flood level.
3. Figure 4 shows an excerpt from the CoGG 1% AEP flood mapping from the 2020 Lara Flood Study[3] available on the CoGG website:
    a. The green shading shows the known flood extent prior to the 2020 study update and the blue shading shows additional land liable to flooding identified by the 2020 study.
    b. The inundation shown on the Site is from the local catchment runoff, i.e., it is not riverine flooding from Hovells Creek but is from rainfall falling on the Site. This is evident because the

[1] https://mapshare.vic.gov.au/vicplan/
[2] https://digitaltwin.vic.gov.au/public/
[3] https://www.geelongaustralia.com.au/stormwater/article/item/8d93690ab320663.aspx

CCMA flood extent (Figure 3) is from the same dataset used by the CoGG in Figure 4 but the CCMA has removed all local catchment flooding to show only riverine flooding.

c. Other than a portion of the rail corridor there are no external catchment draining through the Site. The management of the local catchment runoff is addressed separately in the Stormwater Management Study prepared by Loetis.

Therefore, it is concluded that the Site is unaffected by riverine flooding and hence changes to ground elevations (cut/fill) will not cause flood impacts. The development of the Site will increase runoff in a local catchment event and management of this is documented in the Stormwater Management Study prepared by Loetis.

Director

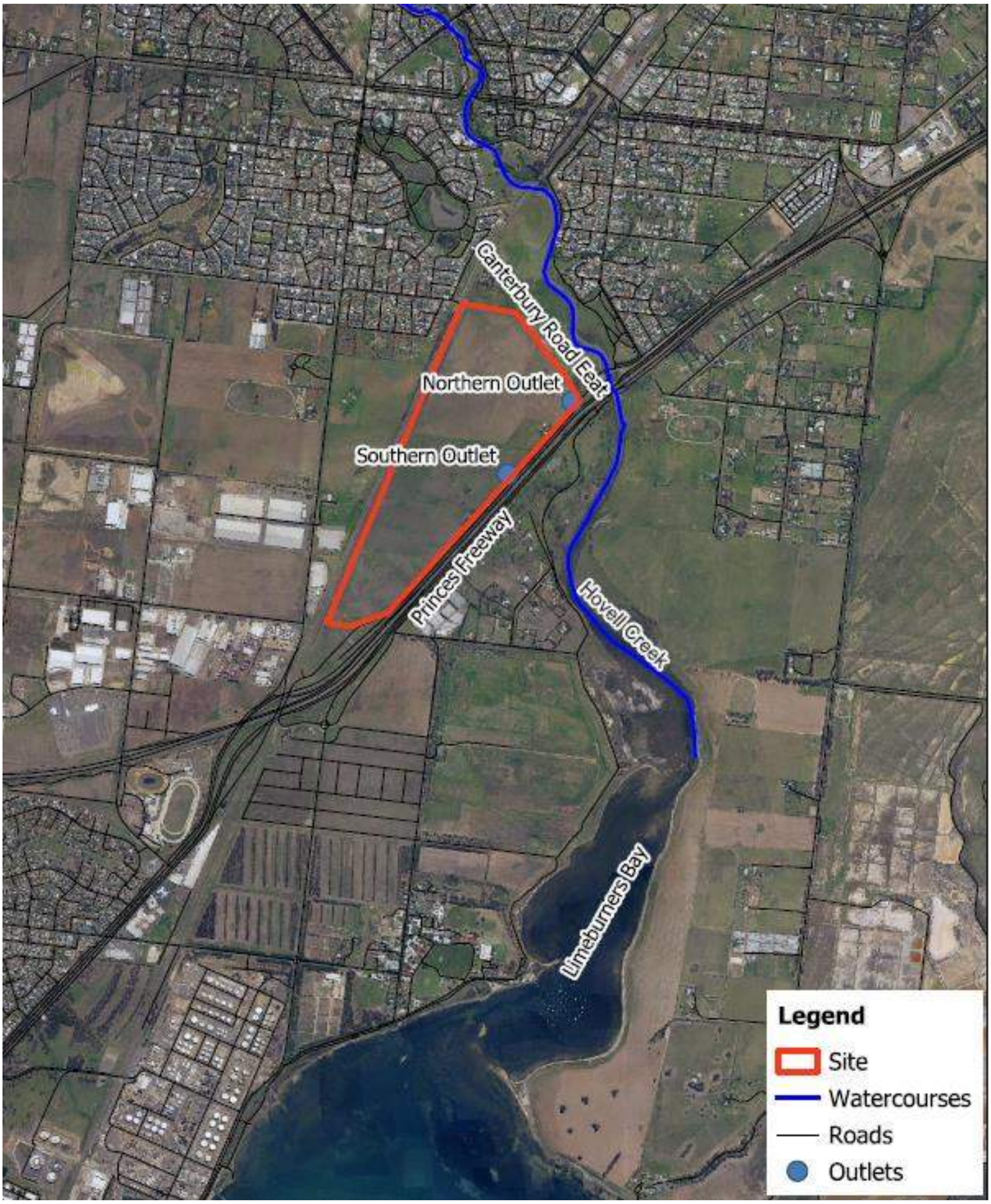


Figure 1 Site Locality

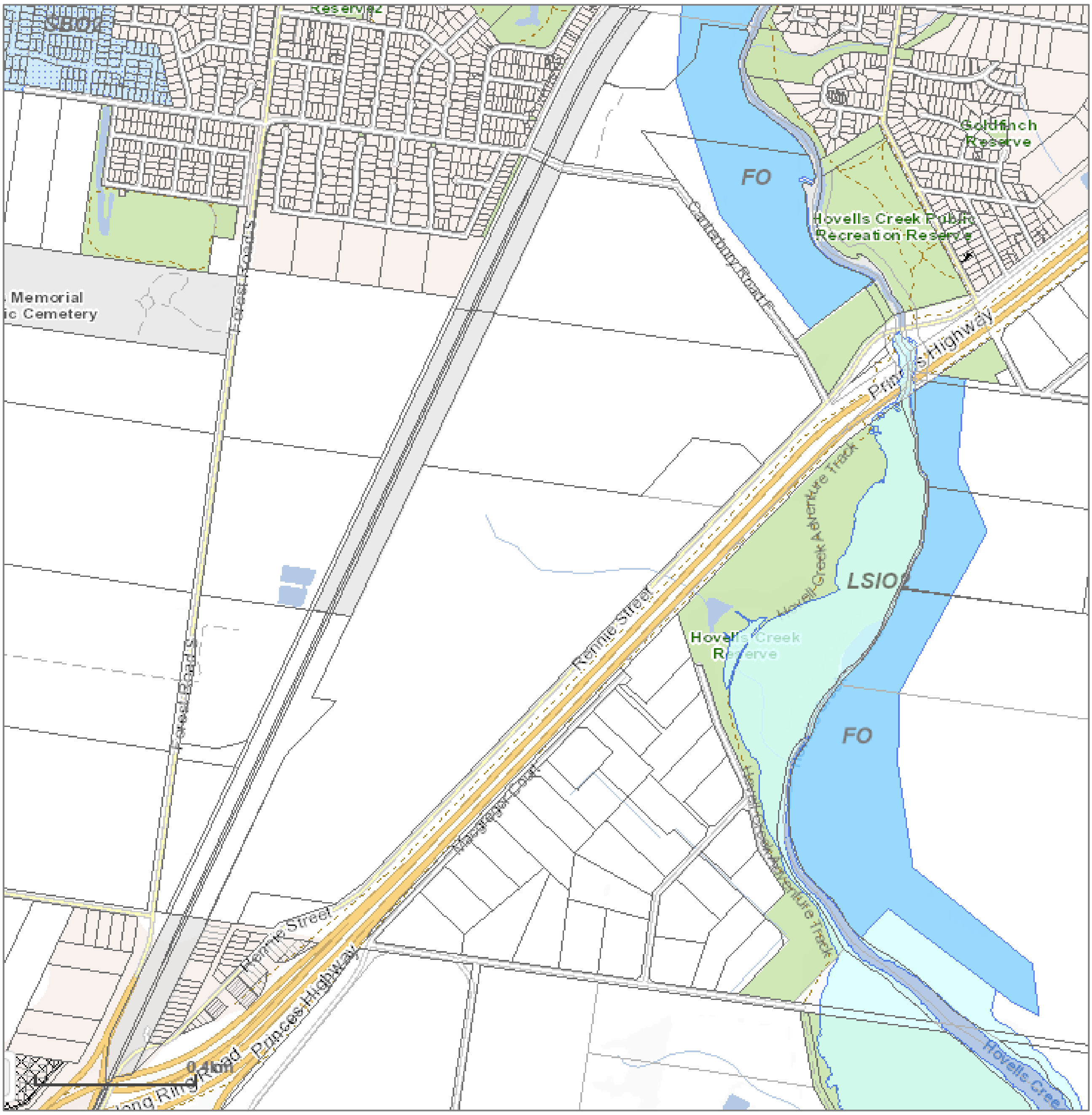


Figure 2 Flood related planning scheme overlays

Figure 3 CCMA 1% AEP Regional (Riverine) Flood Extent

Figure 4 1% AEP Flood mapping from CoGG Lara Flood Study (2020)

ATTACHMENT E - CCMA Flood Advice 2022

CMA Reference No:	CCMA-F-2022-00730
Document No:	1
Council No:	C444
Date:	05 August 2022

Peter Smith
Greater Geelong
Po Box 104,
Geelong Vic 3220

strategicplanning@geelongcity.vic.gov.au

Dear Peter,

CMA Reference Number:		**CCMA-F-2022-00730**
Re:		**S 19 - Notice of Planning Scheme Amendment**
Location	**Street**	**Canterbury Road Lara Vic 3212**
	Cadastral	**Multiple lots**

I refer to your referral dated 05 July 2022, received at the Corangamite Catchment Management Authority on 05 July 2022 in accordance with the provisions of *Section 19 of the Planning and Environment Act 1987.* I apologise for the delay to our response.

Below is the Authority's understanding of the application:

The applicant(s) propose the following;

Proposed Development Type: Overlay and Zoning Amendment

Proposed Development Description: Lara Rezoning - Canterbury Road East and Princes Highway

on the abovementioned proposed development location.

The Authority's assessment indicates that the property is covered by the following Zones and Overlays in the Greater Geelong Planning Scheme:

Zone(s): Farming Zone, Transport Zone 1 - State Transport Infrastructure

Overlay(s): Floodway Overlay

Summary and Conditions

The Authority understands the application relates to an Overlay and Zoning Amendment at Canterbury Road Lara Vic 3212.

The Corangamite CMA has an interest in assessing planning scheme amendments to ensure floodplain and waterway management objectives are met. The results from the Lara Flood Study 2020 effect this site and have been used to form the basis for our assessment on this property.

The authority has not assessed this application in relation to stormwater management or impacts on the capacity of stormwater drainage infrastructure in the area. Council, as the drainage authority, is the responsible authority for managing stormwater flood risk, including applying the planning requirements of Clause 56 of the Victorian Planning Provisions' Practice Note 39 to ensure that new developments do not have significant third-party impacts as a result of increased runoff from impervious surfaces.

The authority notes that the entire site is proposed to be zoned as General Residential Zone (GRZ) which does not allow for Public Park and Recreation Zone (PPRZ) or Public Conservation and Resource Zone (PCRZ) within floodplain areas in keeping with similar zoning on adjacent properties.

Results from the Lara Flood Study 2020 indicate that flood depths on the property are likely to reach 4.63 metres in a 1% AEP flood event. Furthermore, the majority (95%) of the floodplain portion of the property is subject to depths greater than 0.3 metres deep and therefore hazardous (Figure 2).

Based on the above, the authority's design requirements for this proposal from a floodplain management perspective are as follows:

1. All new lots, except lots created for public open space or waterway corridor purposes (e.g. PPRZ or PCRZ), must:
    a. be outside the 1% AEP flood extent.
    b. have safe egress routes meeting the applicable flood hazard safety criteria during a 1% AEP flood event to flood free land where emergency facilities are located.
2. Building envelopes must exclude land below the Nominal Flood Protection Level (NFPL).
3. The development must ensure a design philosophy of 'zero adverse impacts' to surrounding areas for all flood events up to and including the 1% AEP event, including flood flow and flood storage.

In accordance with Section 66 of the *Planning and Environment Act 1987*, please provide an electronic copy of the outcome of this proposal to the Authority for our records.

Should you have any queries, please do not hesitate to contact our office at floodinfo@ccma.vic.gov.au. To assist the CMA in handling any enquiries please quote **CCMA-F-2022-00730** in your correspondence with us.

Yours sincerely,

Dr Geoff Taylor
Manager, Floodplains

CORANGAMITE CMA

Property and Flood Information

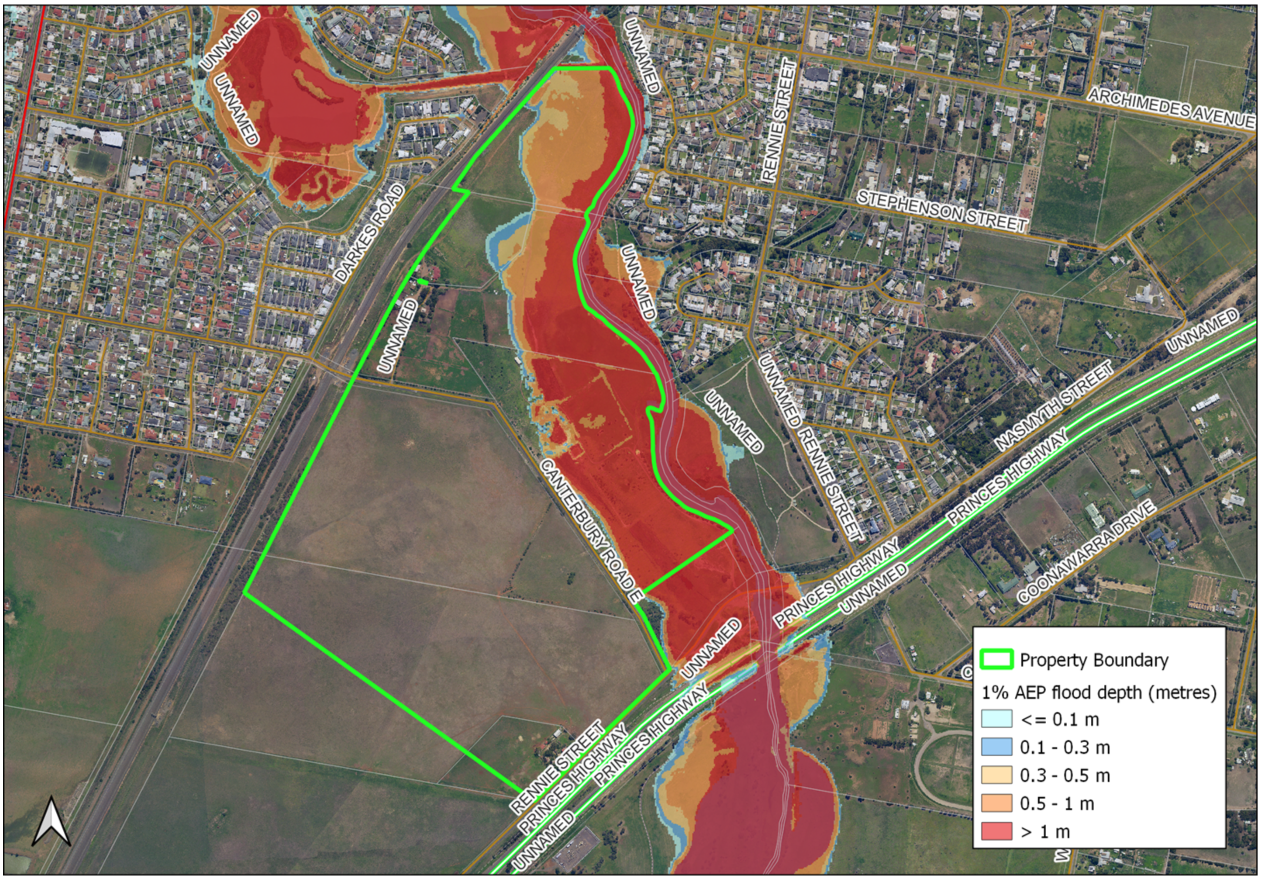


Figure 1. Subject site (green outline) showing the applicable 1% AEP flood depth. No new residential lots will be supported where depths exceed 0.3m (shown by orange/red shadings).

Figure 2. Subject site (green outline) showing the applicable 1% AEP flood hazard. No new residential lots will be supported in areas shown by red shading.

Flood Hazard

According to Attorney-General's Departments Australian Emergency Management handbook Series (EMA Handbook 7), in recent years, a high proportion of flood related deaths in Australia have occurred on flooded roads. Fatalities also result from people being swept away while crossing rivers, stormwater channels, overland flow paths or other flooded areas. In assessing access routes between a site and safe ground it has been shown that people trying to evacuate from flooded land will do so by vehicle in most circumstances, and therefore development decisions should assume this to be the default method. For those who do decide to seek a pedestrian route, walking through flood water is also not considered to be an acceptable means of evacuation. For some, walking is likely to be physically difficult or even impossible and can be the cause of significant mental or physical exhaustion.

Analysis of flood hazard is used to determine if it is safe for people and vehicles leaving a property during a flood event. Inappropriate development is likely to increase the burden on emergency services and personnel if an emergency evacuation is required due to illness, injury, inadequate preparation or loss of essential services. It should be noted that the relative evacuation time does not decrease the flood hazard.

Developments should not occur where the depth and flow of floodwater on a property and affecting the access to the property is hazardous.

Minimum floor levels provide protection for a property and its contents, but separate provisions are needed to protect people moving about or attempting to enter or leave a property so that they are not at risk from deep or fast-flowing water.

Safety is assessed against Australian Rainfall and Runoff Revision Project 10 Safety Criteria.
Safety is defined in terms of the depth and velocity of water over the area in question during a 1% AEP flood event as follows:

1. *Depth must be no greater than or equal to 0.3 metres;* ***and***
2. *Velocity must be no greater than or equal to 3.0 m/s;* ***and***

CORANGAMITE CMA

3. The product of depth multiplied by velocity must be no greater than or equal to 0.3 m^2 per second.

These safety criteria have been used for assessing land use and development on this site, however during flood events the state emergency service do not recommend entering flood waters of any depth or velocity. For further information please see http://www.ses.vic.gov.au/

Floor Levels, Freeboard and the Nominal Flood Protection Level (NFPL)

Freeboard is a height above a defined flood level and is typically used to provide a factor of safety in the setting of floor levels. The minimum freeboard requirements compensate for effects such as wave action (for example from vehicles driving through flood waters) and water movement resulting from variations in topography. Freeboard also provides additional protection from flooding which is marginally above the defined flood level. The Corangamite CMA has adopted the 1% AEP flood level with a minimum 300 mm freeboard requirement.

A greater freeboard may be required on occasions, for instance where buildings contain valuable equipment or potentially hazardous substances.

Freeboard requirements for areas impacted by Climate Change and sea level rise will be established in line with normal floodplain management best practice and consistent with direction on appropriate flood levels in such areas.

Stormwater Management

The Victorian Floodplain Management Strategy (2016) recognises that LGA's are accountable for applying the planning requirements of Clause 56 of the Victorian Planning Provisions' Practice Note 39 to ensure that new developments do not have significant third party impacts as a result of increased runoff from impervious surfaces. Please contact your Council for further information.

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

Decision Guidelines and Background

The following describes how Corangamite CMA assesses proposed developments in areas considered flood-prone. This assessment is based on the current best available information to the authority and has been made considering the State Planning Policy Framework which contains strategic issues of State importance which must be considered when decisions are made.

Clause 65 of the planning scheme general provisions extends the consideration of flood issues to all planning permit applications regardless of whether the site is affected by a flood zone or overlay. Clause 65 requires that for the approval of an application or plan, the council must consider, among other things, the degree of flood risk associated with the location of the land and the use, development or management of the land so as to minimise flood risk.

In addition to clause 65, the flood zone and overlays contain their own decision guidelines that the council must consider when assessing an application. The Floodway Overlay (FO – clause 44.03), Land Subject to Inundation Overlay (LSIO – clause 44.04), and Special Building Overlay (SBO – clause 44.05) contain more detailed decision guidelines.

Guidance on making an application for a planning permit where flooding is a consideration and an explanation of how such an application will be assessed (in effect an explanation of how the decision guidelines are applied) is provided in the Victorian Planning Provision (VPP) Practice Note "Applying for a Planning Permit under the Flood Provisions". A second practice note ("Applying the Flood Provisions in Planning Schemes" provides guidance about applying the flood provisions in planning schemes.

A copy of the Practice Notes can be downloaded from https://www.planning.vic.gov.au/resource-library/planning-practice-notes (or by clicking the links below).

- *Planning Practice Note 11: Applying for a Planning Permit under the Flood Provisions, August 2015*
- *Planning Practice Note 12: Applying the Flood Provisions in Planning Schemes, June 2012*
- *Planning Practice Note 53: Managing coastal hazards and the coastal impacts of climate change, August 2015*
-

In assessing the suitability of any new development, Corangamite CMA considers the following:

- *The safety of future occupants*
- *Avoiding any adverse flood related impacts on other properties*
- *The protection of waterways and other environmental assets*
- *Minimising potential property damage*
- *Ensuring there is no increased burden on community and emergency services.*

To get our consent for a planning permit, your development must pass these five core requirements that we use to assess applications:

Works or structures:
1. *Must not affect floodwater flow capacity*
2. *Must not reduce floodwater storage capacity*
3. *Must meet minimum floor level height (above flood level) relevant to development location (freeboard)*
4. *Must not occur where the depth and flow of floodwaters would create a hazard*
5. *Must not occur in circumstances where the depth and flow of floodwater affecting access to the property is hazardous.*

1% AEP Flood Event

The 1% AEP flood event means that a flood of that magnitude (or greater) has a 1% chance of occurring in any given year. It is also known as the 100 year Average Recurrence Interval (ARI[5]) flood; however a flood of this size or greater may occur more frequently than this, and can happen more than once in any year. The Victorian Government has determined that the 1% AEP flood is the appropriate standard to regulate and protect new developments through the planning and building systems (Victorian Floodplain Management Strategy 2016). The impacts of floods rarer than the 1% AEP flood (i.e. with a probability of less than 1% AEP) are not regulated through the planning and building systems.

The information contained in this correspondence is subject to the disclaimers and definitions attached.

Definitions and Disclaimers

1. The area referred to in this letter as the 'proposed development location' is the land parcel(s) that, according to the authority's assessment, most closely represent(s) the location identified by the applicant. The identification of the 'proposed development location' on the authority's GIS has been done in good faith and in accordance with the information given to the authority by the applicant(s) and/or Council.

2. While every endeavour has been made by the Authority to identify the proposed development location on its GIS using VicMap Parcel and Address data, the authority accepts no responsibility for or makes no warranty with regard to the accuracy or naming of this proposed development location according to its official land title description.

3. **AEP** as Annual Exceedance Probability – is the likelihood of occurrence of a flood of given size or larger occurring in any one year. AEP is expressed as a percentage (%) risk and may be expressed as the reciprocal of ARI (Average Recurrence Interval).
   Please note that the 1% probability flood is not the probable maximum flood (PMF). There is always a possibility that a flood larger in height and extent than the 1% probability flood may occur in the future.

4. **AHD** as Australian Height Datum - is the adopted national height datum that generally relates to height above mean sea level. Elevation is in metres.

5. **ARI** as Average Recurrence Interval - is the likelihood of occurrence, expressed in terms of the long-term average number of years, between flood events as large as or larger than the design flood event. For example, floods with a discharge as large as or larger than the 100 year ARI flood will occur on average once every 100 years.

6. **LiDAR** (**Li**ght **D**etection **A**nd **R**anging) is an optical remote sensing technology which measures the height of the ground surface using pulses from a laser. LIDAR can be used to create a topographical map of the land and highly detailed and accurate models of the land surface.

7. No warranty is made as to the accuracy or liability of any studies, estimates, calculations, opinions, conclusions, recommendations (which may change without notice) or other information contained in this letter and, to the maximum extent permitted by law, the authority disclaims all liability and responsibility for any direct or indirect loss or damage which may be suffered by any recipient or other person through relying on anything contained in or omitted from this letter.

8. This letter has been prepared for the sole use by the party to whom it is addressed and no responsibility is accepted by the authority with regard to any third party use of the whole or of any part of its contents. Neither the

whole nor any part of this letter or any reference thereto may be included in any document, circular or statement without the authority's written approval of the form and context in which it would appear.

9. The flood information provided represents the best estimates based on currently available information. This information is subject to change as new information becomes available and as further studies are carried out.

References

1. Guidelines for Development in Flood Affected Areas, Department of Environment, Land, Water and Planning, 2019: *https://www.water.vic.gov.au/__data/assets/pdf_file/0025/409570/Guidelines-for-Development-in-Flood_finalAA.pdf*

2. Australian Rainfall and Runoff Revision Project 10 – Appropriate Safety Criteria for People April 2010. *http://arr.ga.gov.au/__data/assets/pdf_file/0005/40487/ARR_Project_10_Stage1_report_Final.pdf*

3. Australian Rainfall and Runoff Revision Project 10 – Appropriate Safety Criteria for Vehicles February 2011. *http://arr.ga.gov.au/__data/assets/pdf_file/0004/40486/ARR_Project_10_Stage2_Report_Final.pdf*

4. Victorian Floodplain Management Strategy 2016, available at *https://www.water.vic.gov.au/managing-floodplains/new-victorian-floodplain-management-strategy*

5. Corangamite Regional Floodplain Management Strategy 2018-2028, https://ccma.vic.gov.au/wp-content/uploads/2019/10/Corangamite-RFMS-TEXT-for-WEB.pdf

ATTACHMENT F - Plan for Victoria, Map 15

ATTACHMENT G - Response to drainage evidence

The boxed conclusions in sections 5-10 are generally acceptable, on the basis of the information presented to date, with the exception of 6.1 Climate Change.

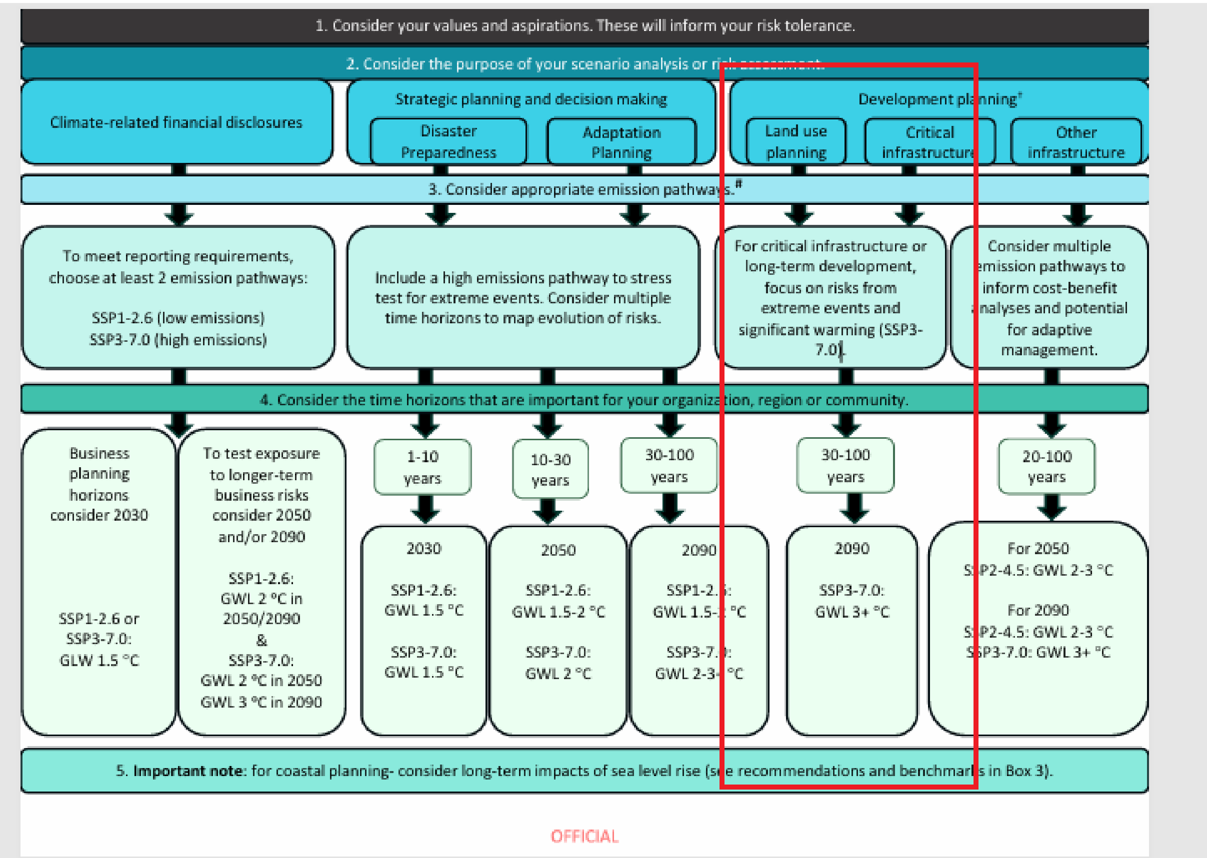
For s6., the City's *Design Note 2* includes relevant direction:

Design rainfall

The appropriate rainfall data and/or IFD charts to be downloaded from the Australian Rainfall and Runoff (ARR) Data Hub website to determine the design rainfall. All infrastructure is to be designed for the asset lifecycle SSP3 2100.

https://www.geelongcity.vic.gov.au/services/building-planning-and-development/planning-permits/infrastructure-design-manual/stormwater-detention-storage-design

This generally aligns with [Draft National Climate Scenario Guidance - Department of Climate Change, Energy, Environment and Water](), which recommends land use planning consider a SSP3-7.0 to the year 2090 timeframe:



In Section 11 DPO48:

- The references to WSUD Engineering Procedures: Stormwater CSIRO Publishing 2005 should remain. Whilst EPA Publication 1739.1 is now referenced in the planning scheme, the two documents serve different purposes.
- The comment *There is no, and has never been, a requirement to meet predevelopment pollutant loadings. The requirement is a reduction of the urban pollutant loads generated* is correct. Point 1 under "*A Stormwater Management System that"* can be reworded to (or similar): "Ensures peak discharge rates of all stormwater leaving the site post development are no greater than pre-development. Pollutant loads must achieve best practice pollutant removal targets"