349/2020/P – 91 Coast Avenue Paynesville Lot A PS 802718E USE AND DEVELOPMENT OF A RETIREMENT VILLAGE, BUSINESS IDENTIFICATION SIGNAGE AND SUBDIVISION (CREATION OF ROAD AND RESERVE)

Endorsed Plans

- 1. The use and development and subdivision as shown on the endorsed plans must not be altered without the prior written consent of the Responsible Authority.
- 2. All dwellings developed on the subject land must only be of the four types shown on the endorsed plans, or as otherwise approved, to the satisfaction of the Responsible Authority.
- 3. The landscaping shown on the endorsed plans must be maintained to the satisfaction of the Responsible Authority.

Staging

- 4. The use and development must be undertaken in accordance with the endorsed Villa Staging Plan (Crossco Consulting, Version 2355/008-C Dated 09/03/2021), except with the prior written consent of the responsible authority.
- 5. The subdivision of the land must be undertaken in accordance with the subdivision staging plan (Crowther & Sadler, Version 1 Dated 04/02/2021), except with the prior written consent of the responsible authority.

Retirement Village

- 6. All plant and machinery for the Community Centre and Workshop must be enclosed with sound proofing material, to the satisfaction of the Responsible Authority. All plant and machinery must not be used until the soundproofing has been implemented to the satisfaction of the Responsible Authority.
- 7. External lighting associated with the Community Centre and workshop must be designed, baffled and located to prevent any detrimental effect on nearby land, to the satisfaction of the Responsible Authority.

Occupation of buildings

- 8. Each building must not be occupied until the following works have been completed to the satisfaction of the responsible authority in relation to that building:
 - a) The building is connected to reticulated water supply, sewerage, drainage, and underground electricity to the requirements of the relevant servicing authority;
 - b) A telecommunications service has been provided and is available to be connected by the resident(s) or occupant(s) of the building;
 - c) Legal and practical road access has been established to the entry of the village and the car parking and driveway areas have been constructed in accordance with the endorsed plans; and
 - d) All landscaping works have been completed generally in accordance with the endorsed plan.

- e) A non-combustible or low-combustible 1.8 metre tall boundary fence is constructed to the Western boundary.
- f) A 20 metre wide managed land area is established to the west of the constructed development. Where such requirement cannot be met within the property, a written agreement between landowners must be entered into which outlines:
 - a. The relevant parties bound by the agreement; and
 - b. Who/what entity is responsible for managing the land;

to the satisfaction of the responsible authority.

If there is any doubt as to the ongoing obligations being met, the landowner must enter into an agreement with the responsible authority in accordance Section 173 of the *Planning and Environment Act 1987*. The agreement must be prepared by the owner. The cost of the preparation, review and recording on the title of the agreement in accordance with Section 181 of the Planning and Environment Act 1987 to the satisfaction of the responsible authority must be borne by the owner of the land.

S.173 Legal Agreements

- 9. Before any works associated with the development start, Legal Agreement AQ868619Y must be ended wholly in relation to Lot A on PS802718E.
- 10. Before any works associated with the development start, the landowner must enter into an agreement with the responsible authority in accordance Section 173 of the *Planning and Environment Act 1987,* which will provide that:
 - a) Subdivision and Development of the land must be generally in accordance with the endorsed plans of this permit as amended from time to time with the prior written consent of the responsible authority; and
 - b) In the event that the permit expires, the future subdivision of the land must be to the satisfaction of the responsible authority.

This agreement must be prepared by the owner. The cost of the preparation, review and recording on the title of the agreement in accordance with Section 181 of the Planning and Environment Act 1987 to the satisfaction of the responsible authority must be borne by the owner of the land.

Signage

- 11. The location and details of signs and supporting structure as shown on the endorsed plans must not be altered without the written consent of the Responsible Authority.
- 12. The sign(s) must not contain any flashing lights.
- The sign(s) must be constructed in a safe and working condition, and the appearance of the sign(s) must be maintained, to the satisfaction of the Responsible Authority.
- 14. The sign(s) must not be illuminated without the written consent by the Responsible Authority.

Subdivision

- 15. The owner of the land must enter into an agreement with:
 - A telecommunications network or service provider for the provision of telecommunication services to each dwelling shown on the endorsed plan in accordance with the provider's requirements and relevant legislation at the time; and
 - A suitably qualified person for the provision of fibre ready telecommunication facilities to each lot shown on the endorsed plan in accordance with any industry specifications or any standards set by the Australian Communications and Media Authority, unless the applicant can demonstrate that the land is in an area where the National Broadband Network will not be provided by optical fibre.
- 16. Before issue of a Statement of Compliance for Stage 1 of the subdivision under the Subdivision Act 1988, the owner of the land must provide written confirmation from:
 - A telecommunications network or service provider that all lots are connected to or are ready for connection to telecommunications services in accordance with the provider's requirements and relevant legislation at the time; and
 - A suitably qualified person that fibre ready telecommunication facilities have been provided in accordance with any industry specifications or any standards set by the Australian Communications and Media Authority, unless the applicant can demonstrate that the land is in an area where the National Broadband Network will not be provided by optical fibre.
- 17. All new services must be placed underground in shared trenching. Design for the installation of services must meet the requirements of the relevant authorities and must be approved by those authorities to the satisfaction of the responsible authority.

Landscaping

- 18. Before any works associated with the development start, a detailed landscape plan to the satisfaction of the Responsible Authority must be submitted to and approved by the Responsible Authority. When approved, the plans will be endorsed and will then form part of the permit. The plans must be drawn to scale. The plans must show:
 - A schedule of all proposed vegetation (trees, shrubs and ground covers) which includes botanical names, common names, mature size and total quantities of each plant.
 - Pot sizes and specific location of the plants to be planted.
 - Buildings, outbuildings and other structural features on the land that influence the landscape design.
 - Natural features that influence the landscape design.
 - Proposed irrigation methods.
 - The proposed design features such as paths, paving, lawn, finished surfaces and outdoor lighting

- 19. Landscaping in accordance with this approved plan and schedule must be completed before the start of works for the next stage of the development to the satisfaction of the responsible authority.
- 20. Before the certification of subdivision Stage 3, a detailed reserve landscape plan to the satisfaction of the Responsible Authority must be submitted to and approved by the Responsible Authority. When approved, the plans will be endorsed and will then form part of the permit. The plans must be drawn to scale. The plans must show:
 - A schedule of all proposed vegetation (trees, shrubs and ground covers) which includes botanical names, common names, mature size and total quantities of each plant.
 - Pot sizes and specific location of the plants to be planted.
 - Natural and structural features on the land that influence the landscape design.
 - Proposed irrigation methods.
 - The proposed design features such as paths, paving, lawn, finished surfaces and outdoor lighting
- 21. Prior to the issue of statement of compliance for the plan of subdivision for stage 3, the reserve landscaping is to be implemented or bonded to the satisfaction of the responsible authority.

The works must be subject to a two-year maintenance and defects liability period. Any dead or diseased plants must be replaced during this maintenance period.

Engineering

- 22. Before any works associated with the development start, detailed drainage management plans to the satisfaction of the Responsible Authority must be submitted to and be approved by the Responsible Authority. The plans must be generally in accordance with the stormwater management plan considered with the application. When approved, the plans will then form part of the permit. The design and documentation for the drainage works must be prepared in line with standard engineering practice to provide for the collection, control and disposal of all stormwater runoff, and show:
 - a) Drainage infrastructure, including pipes/drains and pits (where required).
 - b) Methods of on-site detention (e.g. detention basins, bioretention swale drains rainwater tanks) to limit the rate of discharge of stormwater runoff from the development.

Any assumptions or requirements used within any supporting stormwater report must also be reflected on the plans, including areas of roof connected to rainwater tanks, any impervious areas draining to raingardens, and any tanks plumbed to toilets.

- 23. All drainage works and requirements must be undertaken and completed to the satisfaction of the Responsible Authority for each subdivision and villa development stage.
- 24. Before any works associated with the roadworks start, a road construction plan to the satisfaction of the Responsible Authority must be submitted to and be approved by the Responsible Authority. When approved, the plans will then form part of the permit. The plans must be drawn to scale with dimensions. The plans must show:
 - a) A road connection and extension of Coast Avenue and Ashley Street of the same standard and road reserve width as those existing, including concrete footpaths on each side of the road to the satisfaction of the responsible authority.
 - b) Verge areas with a width sufficient for the construction of drainage infrastructure, pedestrian access and provision of street trees to the satisfaction of the responsible authority.
 - c) Street lighting (using LED technology).
 - d) Statutory signage and traffic control devices and line marking, as appropriate.

The documentation for the road works must include provision for maintenance and repair of damage to any existing road and drainage infrastructure.

The works must be subject to a twelve month defects liability period.

All works and requirements must be undertaken and completed to the satisfaction of the Responsible Authority prior to the Statement of Compliance for each relevant subdivision stage.

- 25. Before any works associated with the development start, a civil construction plan to the satisfaction of the Responsible Authority must be submitted to and be approved by the Responsible Authority. When approved, the plans will then form part of the permit. The plans must be drawn to scale with dimensions. The plans must show:
 - a) Asphalt or concrete pavement for all accessways, with a minimum trafficable width of 6 metres, with non-standard mountable kerb and channel on each side to the satisfaction of the Responsible Authority.
 - b) Fully sealed pavement with a turning area with a minimum radius of ten metres or other suitable treatment.
 - c) Verge areas with a width sufficient for the construction of drainage infrastructure and for pedestrian access on one side of the accessway.
 - d) A non-standard concrete footpath of minimum width 1metre on one side of all new internal accessways to the satisfaction of the Responsible Authority.
 - e) Driveways to be located in safe locations, as appropriate.

- f) Street lighting (using LED technology).
- g) Statutory signage and traffic control devices and line marking within the development, and at entry points to the development, as appropriate.
- h) Hard stand areas for the collection of Wheelie Bins in accordance with the Waste Management Plan.

The documentation for the road works must include provision for maintenance and repair of damage to any existing road and drainage infrastructure.

The works must be subject to a twelve month defects liability period.

All works and requirements must be undertaken and completed to the satisfaction of the Responsible Authority.

- 26. Before any works associated with the subdivision and roadworks start, a construction management plan to the satisfaction of the Responsible Authority must be submitted to and approved by the Responsible Authority. When approved, the plan will be endorsed and will then form part of the permit. The plan must include:
 - Consideration of staging of works and staging of any of the following requirements where appropriate;
 - Location of any temporary construction works office and machinery storage area;
 - The construction works access way;
 - Details of construction days and hours;
 - Vehicle and machinery exclusion zones;
 - Location and management requirements of stockpiled soil;
 - Measures and techniques to protect drainage lines and watercourses from sediment runoff from disturbed or under construction areas;
 - Measures and methods to be employed to protect sites of conservation importance, native vegetation and areas of archaeological significance;
 - Measures and techniques to manage dust control;
 - A note that Dewatering of sedimentation/retention basins during construction is prohibited without the prior approval of the Responsible Authority;
 - The location of a machinery and vehicle wash down area and requirements for the ongoing use of the of the machinery and vehicle wash down area by contractors as appropriate;
 - Location and management of litter storage areas, construction waste areas and chemical storage areas; and
 - Methods of ensuring all contractors are informed of the requirements of the construction management plan and persons responsible for ensuring the construction management plan is adhered to.

All construction works and requirements of the construction management plan must be undertaken and completed in accordance with the endorsed construction management plan to the satisfaction of the Responsible Authority.

All works and requirements must be undertaken and completed to the satisfaction of the Responsible Authority.

- 27. Before any works associated with the use and development start, a construction management plan to the satisfaction of the Responsible Authority must be submitted to and approved by the Responsible Authority. When approved, the plan will be endorsed and will then form part of the permit. The plan must include:
 - Consideration of staging of works and staging of any of the following requirements where appropriate;
 - Location of any temporary construction works office and machinery storage area;
 - The construction works access way;
 - Details of construction days and hours;
 - Vehicle and machinery exclusion zones;
 - Location and management requirements of stockpiled soil;
 - Measures and techniques to protect drainage lines and watercourses from sediment runoff from disturbed or under construction areas;
 - Measures and methods to be employed to protect sites of conservation importance, native vegetation and areas of archaeological significance;
 - Measures and techniques to manage dust control;
 - A note that Dewatering of sedimentation/retention basins during construction is prohibited without the prior approval of the Responsible Authority;
 - The location of a machinery and vehicle wash down area and requirements for the ongoing use of the of the machinery and vehicle wash down area by contractors as appropriate;
 - Management requirements for vegetation before the area is developed, to reduce bushfire risk;
 - Location and management of litter storage areas, construction waste areas and chemical storage areas; and
 - Methods of ensuring all contractors are informed of the requirements of the construction management plan and persons responsible for ensuring the construction management plan is adhered to.

All construction works and requirements of the construction management plan must be undertaken and completed in accordance with the endorsed construction management plan to the satisfaction of the Responsible Authority.

- 28. Areas set aside for parked vehicles and access lanes associated with the villas and community facilities, as shown on the approved plans must be:
 - a) Constructed to the satisfaction of the Responsible Authority.
 - b) Properly formed to appropriate levels to the satisfaction of the Responsible Authority.
 - c) sealed pavement to the satisfaction of the Responsible Authority.
 - d) Drained and maintained to the satisfaction of the Responsible Authority.
 - e) Line-marked to indicate each car space and all access lanes to the satisfaction of the Responsible Authority.

Parking areas and access lanes must be kept available for these purposes at all times to the satisfaction of the Responsible Authority.

- 29. All earthworks associated with the development must be stabilised in accordance with standard engineering design and practices against erosion and failure. All earthworks or retaining structures must not encroach across neighbouring property boundaries to the satisfaction of the Responsible Authority.
- 30. All stormwater runoff from the roofed and paved areas must be discharged to an approved point of discharge to the satisfaction of the Responsible Authority
- 31. Before the issue of a statement of compliance for each subdivision, any portion of Council's existing infrastructure damaged as a result of work undertaken on the site or associated with the development must be repaired/reinstated to the satisfaction of the responsible authority.

Waste Management

- 32. Before the use starts and/or the occupation of the development, a waste management plan to the satisfaction of the Responsible Authority must be submitted to and approved by the Responsible Authority. When approved, the plan will be endorsed and will then form part of the permit. The waste management plan must be complied with to the satisfaction of the Responsible Authority. The plan must include:
 - a) the method and location for garbage collection and recycling;
 - b) designated areas for garbage collection and recycling including provision for the use of private services and/or council services;
 - c) designated areas for bin storage on site with appropriate screening from public viewpoints; and
 - d) designated areas for bin storage on collection days and measures to minimise the impact on amenity, car parking, traffic management and litter management

Bushfire and fire services

Subdivision plan not to be altered

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

Hydrants

- 34. Prior to the issue of a Statement of Compliance under the Subdivision Act 1988 the following requirements must be met to the satisfaction of the CFA:
 - a) Above or below ground operable hydrants must be provided. The maximum distance between these hydrants and the rear of all building envelopes (or in the absence of building envelopes, the rear of the lots) must be 120 metres and the hydrants must be no more than 200 metres apart. These distances must be measured around lot boundaries.
 - b) The hydrants must be identified with marker posts and road reflectors as applicable to the satisfaction of the Country Fire Authority.

Bushfire mitigation

35. Before any buildings are occupied

East Gippsland Water

36. Water and sewer reticulation infrastructure (including sewer connection points) must be extended to service each Lot/unit to East Gippsland Water's requirements, at the cost of the Applicant/Developer. Subject to East Gippsland

Water's requirements being met, relevant infrastructure will then become Gifted Assets (refer Notes). Each Lot/unit is to be separately serviced by the water and sewer reticulation system and able to be separately metered (water) as appropriate to the satisfaction of East Gippsland Water.

- 37. Should the Developer decide not to Gift newly created Assets to East Gippsland Water, a Supply By Agreement (private supply – water and sewer) must be negotiated prior to design approval and signed prior to issue of Statement of Compliance.
- 38. Arrangements for the design, construction, commissioning and acceptance of all Gifted Assets required by East Gippsland Water to extend water and / or sewerage services to each Lot require written approval by East Gippsland Water.
- 39. Provide easements on the plan of subdivision over newly created or existing infrastructure, as required by East Gippsland Water in accordance with Section 136 of the Water Act 1989; including assets constructed in Common Property and/or under Section 12(2) easement over the land.
- 40. Common Areas (e.g. Community Centre) to be separately connected/meter to reticulated water supply; no Master Meters will be approved.
- 41. Any connection of proposed water storage tanks to the reticulated water supply must have approved backflow preventions devices/management to prevent cross contamination.
- 42. Provision of acceptable electronic/digital map to use as an overlay on GIS that shows Unit/Leasehold boundaries and 'street' addresses in order to effectively provide operation and maintenance services as well as responding to faults. This information will also be required for rating purposes.
- 43. Payment of applicable Development Planning Charges by the Applicant/ Developer to East Gippsland Water (refer Notes).

AusNet Services conditions

- 44. The applicant must enter in an agreement with AusNet Electricity Services Pty Ltd for supply of electricity to each lot on the endorsed plan.
- 45. The applicant must enter into an agreement with AusNet Electricity Services Pty Ltd for the rearrangement of the existing electricity supply system.
- 46. The applicant must enter into an agreement with AusNet Electricity Services Pty Ltd for rearrangement of the points of supply to any existing installations affected by any private electric power line which would cross a boundary created by the subdivision, or by such means as may be agreed by AusNet Electricity Services Pty Ltd.
- 47. The applicant must provide easements satisfactory to AusNet Electricity Services Pty Ltd for the purpose of "Power Line" in the favour of "AusNet Electricity Services Pty Ltd" pursuant to Section 88 of the Electricity Industry Act 2000, where easements have not been otherwise provided, for all existing AusNet Electricity Services Pty Ltd electric power lines and for any new power lines required to service the lots on the endorsed plan and/or abutting land.

- 48. The applicant must obtain for the use of AusNet Electricity Services Pty Ltd any other easement required to service the lots.
- 49. The applicant must adjust the position of any existing AusNet Electricity Services Pty Ltd easement to accord with the position of the electricity line(s) as determined by survey.
- 50. The applicant must set aside on the plan of subdivision Reserves for the use of AusNet Electricity Services Pty Ltd for electric substations.
- 51. The applicant must provide survey plans for any electric substations required by AusNet Electricity Services Pty Ltd and for associated power lines and cables and executes leases for a period of 30 years, at a nominal rental with a right to extend the lease for a further 30 years. AusNet Electricity Services Pty Ltd requires that such leases are to be noted on the title by way of a caveat or a notification under Section 88 (2) of the Transfer of Land Act prior to the registration of the plan of subdivision.
- 52. The applicant must provide to AusNet Electricity Services Pty Ltd a copy of the plan of subdivision submitted for certification that shows any amendments that have been required.
- 53. The applicant must agree to provide alternative electricity supply to lot owners and/or each lot until such time as permanent supply is available to the development by AusNet Electricity Services Pty Ltd. Individual generators must be provided at each supply point. The generator for temporary supply must be installed in such a manner as to comply with the Electricity Safety Act 1998.
- 54. The applicant must ensure that all necessary auditing is completed to the satisfaction of AusNet Electricity Services Pty Ltd to allow the new network assets to be safely connected to the distribution network.

Permit Expiry

- 55. This permit will expire if any of the following circumstances applies:
 - The development is not started within two years of the issue date of this permit.
 - The development is not completed within ten years of the issue date of this permit.
 - The use has not commenced within four years of the issue date of this permit.

In accordance with section 69 of the Planning and Environment Act 1987, an application may be submitted to the Responsible Authority for an extension of the periods referred to in this condition.

- 56. This permit will expire with respect to subdivision of the land if any of the following circumstances applies:
 - The plan of subdivision for Stage 1 is not certified within two years of the issue date of this permit.

- The plan of subdivision for Stages 2 and 3 are not certified within 7 years of the issue date of this permit.
- A Statement of Compliance is not issued within five years of the date of each stage's plan of subdivision being certified.

In accordance with section 69 of the Planning and Environment Act 1987, an application may be submitted to the Responsible Authority for an extension of the periods referred to in this condition.

Notes:

1. Please be informed that you are required to check with a Private Building Surveyor if a Building Permit is required for the building works relating to this planning permit.

Building works on this site must comply with the requirements of the Victorian Building Act and Building Regulations, the National Construction Code (NCC) and relevant Council Local Laws.

- 2. This planning permit has been issued on the basis of planning scheme overlay requirements and does not approve the siting of individual villas or approve any non-compliance with building regulations.
- 3. Before undertaking works within a Council road reserve, a works consent of works within road reserve must be obtained from the *Roads and Traffic* unit of Council. Refer to the Infrastructure Design Manual (IDM) for crossover designs.
- 4. CFA's requirements for identification of hydrants are specified in 'Identification of Street Hydrants for Firefighting Purposes' available under publications on the CFA web site (www.cfa.vic.gov.au)

East Gippsland Water notes

5. (A) Subject to its written acceptance of the Gifted Assets, East Gippsland Water will become responsible for ownership and the ongoing maintenance and operation of the assets in perpetuity.

(B) Development Planning Charges apply where East Gippsland Water are involved in the developer's works (actual charge is based on the final cost of the works). Contact East Gippsland Water for further information on these fees.

(C) Any additional infrastructure required to adequately service the development would need to be provided by the developer at the developer's cost. The type and extent of additional infrastructure, if needed, is subject to detailed engineering design and approval by East Gippsland Water.

(D) A back-flow prevention device needs to be installed prior to connecting any commercial units (Hotel, Restaurant, Café) to the reticulation water infrastructure; and

(E) A Trade Waste Agreement may need to be executed between the owner(s) of the commercial units and EGW prior to connecting the development to the reticulation sewerage infrastructure.

(F) No structure or fill is to be placed over East Gippsland Water works and/or easements without prior agreement by East Gippsland Water.



LICENSED SURVEYORS & TOWN PLANNERS

152 Macleod St. PO Box 722, Bairnsdale, VIC 3875

> P: 5152 5011 F: 5152 5705

Planning Report

Proposed Retirement Village and subdivision 91 Coast Avenue, Paynesville Lot A on PS 802718E

Our Reference - 18741

8 September 2020





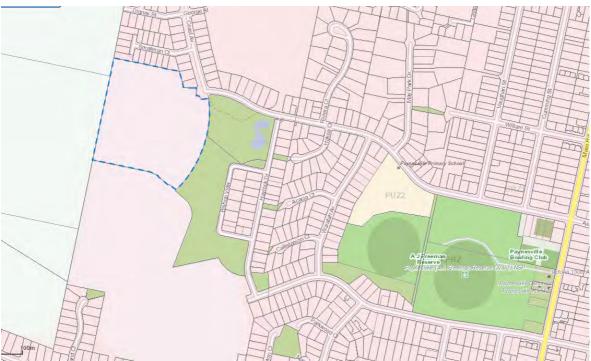
Contents

1.	Introduction	3
2.	Subject Land & Surrounding Context	4
3.	The Proposal	7
4.	Application triggers	23
5.	Cultural Heritage	26
6.	Planning Policy	29
	6.1 Planning Policy Framework	29
	6.2 Local Planning Policy	29
7.	Planning Elements	31
	7.1 General Residential Zone	31
	7.2 Design & Development Overlay	36
	7.3 Particular Provisions	37
8.	Conclusion	39
9.	Attachments Copy of Title BCN Design & Access plan set (Ref 20-0102, Rev. TP_A) Site Plan – Proposed Site Plan – Proposed Site Plan – Caravan/Boat/Workshop Floor Plan Elevations – Community Centre Floor Plan/Elevations – Commander Floor Plan/Elevations – Commander Floor Plan/Elevations – Commander Floor Plan/Elevations – Lieutenant & Workshop Davidson Design Studio plan set (Ref. 200416, Rev. C) comprising: Landscape Masterplan Community Centre Entries and Pocket Parks Caravan and Boat Storage Typical Residence Landscapes Boundary Fence Detail Proposed Subdivision Plan (Version 1) Design Response Plan (Version 1) Crossco Consulting Pty. Ltd. document set comprising: Stormwater Management Strategy (Final 01) Overall Services Layout Plan (2355-005-A) Village Services Layout Plan (2355-007-A)	

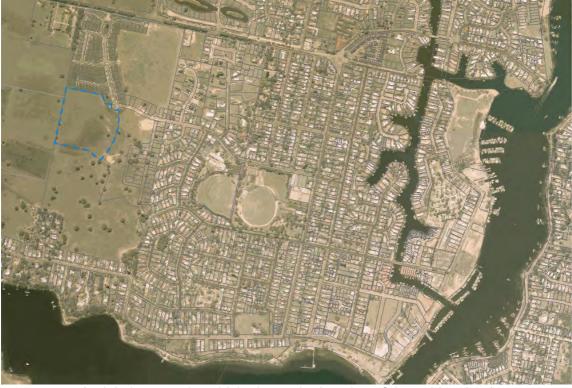
Please note: Client fee of \$26,317.70 to be paid over phone via Credit Card

1. Introduction

This planning report is prepared in support of a proposed Retirement Village at 91 Coast Avenue, Paynesville. The report addresses the provisions of the General Residential Zone – Schedule 1 and Design and Development Overlay – Schedule 14 of the *East Gippsland Planning Scheme*.



Subject land denoted with dashed blue line (Source: Planning Maps Online)



Aerial photography which shows the location of the subject land on the western periphery of Paynesville (Source: VicPlan)



2. Subject Land & Surrounding Context

Previously Endorsed Plan (now superseded)

The subject land has been created as part of the broader Paynesville Park residential estate, the development of which was initially commenced as the Coast estate. Master planning approved by Planning Permit 583/2004/P to accommodate a total 376 vacant allotments for of residential development.

The Estate is on the western periphery of the established Paynesville settlement, and has been designed to include areas of park and wetland, providing pedestrian, bicycle and road access to adjacent facilities to the east including the Paynesville Primary School and AJ Freeman Reserve.

Following detailed consideration and market analysis, our Client has determined to forfeit the entitlement to create 50 of the approved residential allotments, utilising an existing balance cell to accommodate the proposed use and development which is the subject of this Application.

The subject land is formally described as Lot A on Plan of Subdivision 802718 and is approximately 6.732 hectares in area. The property has a relatively even landform, sloping very gently downwards in a south-easterly direction.

The subject land has an abuttal to an existing roundabout at the intersection Coast Avenue (to the north) and Ashley Street (to the east). Master planning for the precinct anticipates the extension of each of these roads, with Ashley Street to be extended to the west for the full width of the subject land, and Coast Avenue to the south for the full length of the property.

The subject land is encumbered by a Section 173 Legal Agreement (AQ868619Y) which applies to all land within the broader estate either developed, or to be developed by Paynesville Park Pty. Ltd. An earlier version of a similar Legal Agreement (AF202923J) applies to those allotments created as part of the Coast estate, and to those lots created in Stage 9A by Paynesville Park. The Agreement seeks to ensure consistency with the plans endorsed under Planning Permit 583/2004/P/D as amended from time to time, except with the prior written consent of Council.

The subject land contains two eucalyptus trees which have previously been approved for removal in accordance with Clause 52.17 relating to Native Vegetation.



Extract from Plan of Vegetation Removal, as endorsed on 23 December 2016, with subject land highlighted in yellow

Offsets to compensate for the vegetation removal have been secured and approved by the Department of Environment, Land, Water and Planning, with the allocated Credit Extract endorsed by Council on 13 July 2017 in accordance with Condition 74 of Planning Permit 583/2004/P/D.

The trees in question are therefore deemed to be lost, given they are able to be lawfully removed at any time without further consideration.

The balance of the subject land has a good coverage of pastural grasses, which has until recently been regularly grazed by the former owner as part of their broader rural holding.



Drone image looking west across the subject land, with the Newlands Arm Backwater shown in the distance (Source: Crossco Consulting)

3. The Proposal

The subject Application proposes the development of a Retirement Village which will deliver a high quality residential experience whilst providing residents with a higher level of amenity and security.

The proposed Retirement Village will be comprised of 93 individual villas providing self-contained, independent living in a community setting, with associated communal facilities providing opportunity for recreation and socialising.

Plans prepared by project Designer, BCN Design & Access. form part of the Application, and provide a sound representation of each of the elements proposed to form part of the lifestyle community.

Our Client is an experienced developer of this style of residential experience. Most recent examples of developments facilitated by our Client include the Eastwood Retirement Village in Bairnsdale, Mountain View Retirement Village in Leongatha and Encore Living Retirement Village in Trafalgar. Our Client has also obtained Planning approval from Baw Baw Shire Council for a 151 villa in Warragul, in accordance with the Warragul Precinct Structure Plan.



Existing Villas at Eastwood Retirement



Eastwood Retirement Community Centre shown in the background of this streetscape



Mountain View Leongatha Community Centre



Images taken from <u>www.mountainviewretirementvillage.com.au</u>



Images taken from www.encoreliving.com.au/trafalgar



Our Client has acknowledged the growing demand in the East Gippsland market for this style of living opportunity. Paynesville is considered an ideal location given its relative proximity to Bairnsdale for higher quality goods and services, with easy access to Melbourne via a good quality road network or public transport. The affordability of housing in Paynesville and the current provision of Community Health and Hospital services within the Shire has great appeal to retirees from metropolitan Melbourne who desire to release equity from the sale of their existing home and take advantage of the region's climate and slower pace of life.

The proposed development is also expected to appeal to those seeking a greater sense of community and belonging, who still value their independence but would benefit from the support of a likeminded community. Other likely purchasers including those wishing to downsize from larger homes that are now surplus to their requirements, or for those wanting to move off larger rural properties to reduce the burden of management and maintenance. It is expected that this style of residential experience will be of particular appeal to a demographic over the age of 70 years who are dealing with the challenges of deteriorating health and mobility.

The proposed Retirement Village offers a lifestyle experience with a high level of residential amenity amongst extensive, well maintained landscaped grounds providing opportunities for passive and active indoor and outdoor enjoyment.

Villa types

To provide diversity and market choice whilst still ensuring dwellings reflect a desired theme and deliver a cohesive streetscape, the proposed Retirement Village will provide three different Villa types (with a total of five possible variants). Each of the proposed Villas is of single storey brick veneer construction with a Colorbond roof.

As detailed on the plans prepared by BCN Design & Access, the three Villa types offer subtle differences to respond to the differing needs and tastes of prospective purchasers.

The **'Commander'** is a two bedroom villa with open plan kitchen, dining and living area to the rear of the dwelling, providing easy access to outdoor spaces for entertaining. Features include spacious outdoor living areas, and a very functional computer alcove concealed within the hallway. The floor area of the 'Commander' is approximately 162m².

The **'Admiral'** is a three bedroom villa with open plan kitchen, dining and living area to the rear of the dwelling adjacent to private open space. The 'Admiral' is the largest of the three Villas, with a floor area of approximately 167m². The third bedroom provides residents with flexibility to use as a multi-purpose room for craft, study or the like.

The **'Lieutenant'** provides a point of difference, designed as a stand-alone dwelling with a wider northern aspect to maximise solar access and outlook. Three bedrooms (including flexi-room) are proposed, with a centrally located open plan kitchen, living and dining area flowing through from the entry foyer to

the secluded private open space to the rear. The Lieutenant has an area of approximately 164m².

Villas have been designed to be both practical and welcoming. All Villas are provisioned with extensive storage opportunities, with built in robes a feature of all bedrooms. Entry porticos provide an individual sense of arrival, with dedicated foyers provide a feeling of spaciousness on entry. This impression is further enhanced by the light and airy feel achieved through extensive glazing with good solar access.

Each Villa type includes a spacious walk-in-robe to the Master Bedroom, which you walk through to enter the generously proportioned main bathroom. Dual entries to the main bathroom allow for external access, whilst also performing an ensuite function. Each villa includes a separate powder room in response to market preferences, which avoids guests having to use the main bathroom.

Another common feature of each Villa design is the double integrated garage, oversized to accommodate two vehicles and externally accessible storage. Opportunities for private open space are maximised, including areas provided under covered verandahs for all weather enjoyment.

Whilst the Lieutenant is a stand-alone villa, the Commander and Admiral villas are to be constructed as a pair of attached dwellings, connected at the garage with a 7.3 metre long fire rated party wall. The uniform length and placement of the external garage wall provides flexibility in Villa choice, meaning that any combination of the paired Villa types is able to be constructed as an attached 'pair'.

The Commander and Admiral Villa plans depict two versions of each Villa type, with Version A to be used when the garage is to the right of the frontage, and Version B where the garage is to the left of the villa frontage.

To ensure the most efficient development of the site, the majority of villas (64 of 93) will be constructed as 'pairs'. Due to specific considerations such as the location within the Village, orientation or access constraints, 29 villas have been specified for stand-alone villa construction. For Villas 1-8 (inclusive), 25-32 (inclusive) and 85, the Lieutenant villa type is the ideal built form for these specific sites, given the wider axis. Other stand-alone villas proposed throughout the village may require a slightly wider allotment, with the Proposed Site Plan illustrating where these various villas would be constructed without the garage wall on the boundary.

Excluding these stand alone options, every Villa has been designed with the same spatial requirements regarding access, with every garage setback at least 5.2m from either the back of footpath or back of kerb.

This uniformity allows for Villa types to be interchanged subject to market choice. The flexibility afforded by the approval of a range of Villa types is absolutely integral to the success of the development.

The first prospective residents will have the ability to choose their preferred Villa type 'off the plan'. Future residents wanting to move into the community post-construction will then choose from existing Villas available for re-sale.

The Proposed Site Plan utilises typical Villa footprints to provide a demonstration of the manner in which the Retirement Village is likely to be developed. Villa footprints used are notional, with the specific allocation of Villa type to an allotment to occur prior to construction.

The Site Plan – Villa Location Options details which of the proposed villa types may be accommodated on each of the villa sites, with the vast majority of sites able to accommodate four villa types.



Extract from Site Plan – Villa Location Options (Source: BCN Design & Access, Sheet of 9)

The transportability of Villa types across the Retirement Village is not considered to give rise to any negative issues and will achieve a sound Planning outcome.

Security

Of key importance to many residents of this style of Retirement Village is security. Residents want the peace of mind afforded by a regulated

environment, particularly during the evenings. The exclusion of the general public during evening hours is a key contributor to the appeal of this style of living.

It is not uncommon for residents to leave the Community for extended periods for travel, therefore it is important to them to know their home is safe and protected in their absence. Whilst regular surveillance and community interest can provide some protection against unwanted visitors during daytime hours, of an evening security is ensured via additional measures.

Of an evening, vehicular and pedestrian entry to the development is secured and regulated via electronic gates. Residents wishing to enter or exit the site are able to activate the gates from their vehicles via remote sensors, with pedestrian entry facilitated by entering a code into a keypad located at the gate. Pedestrian gates are programmed to open automatically for people wishing to exit the facility.

The main point of entry and exit to the Village will be via Coast Avenue to the west. Gates will be constructed within Common Property for both vehicles and pedestrians, which will remain open during daylight hours. It is anticipated this Village will follow the practice established at other Villages, where the main gates are opened 30 minutes before sunrise, closing 30 minutes after sunset each day.

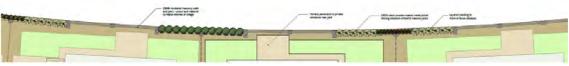


Proposed gate and fencing treatment to Coast Avenue (Source: Davidson Design Studio)

Ashley Street to the north is to be utilised as a secondary point for vehicle exit only. A sliding gate will be erected within Common Property, and will remain in a closed position unless opened from within the site. Emergency services will be provided with the ability to access the site from any gate at any time of day.



The proposed gates and associated fencing is depicted on the Site Plan – Caravan/Boat/Workshop (Sheet 5 of 9), providing details on the design and function of each of the gates, which will be of a high quality design to complement the architectural stylings of the wider Village.



Typical fencing detail and associated landscaping (Source: Davidson Design Studio)

Community Centre

When well designed, the Community Centre is the jewel in the crown of a Retirement Village. In our Client's experience, a communal building which provides for the many and varied needs of residents, with the flexibility to adapt to a multitude of uses will become the social hub of the village.

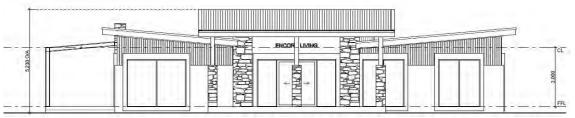
The project Designers have considered the successes and limitations of previous developments and have designed a facility to service the Village community which is both visually appealing and entirely practical.



Community Centre impression (Source: BCN Design & Access)

The proposed Community Centre is a contemporary design utilising a variety of building materials to provide interest whilst ensuring cohesion with the architectural themes established by the Villas. The Community Centre features a centrally located porte cochére emphasised by the highest point of the skillion roof form to the north of the building. Feature dry stone clad piers provide a functional role supporting the roof, as well as emphasising the entrance to the building, with the porte cochère ensuring easy access in all weather conditions.

On both the eastern and western elevations, asymmetrical skillion roof forms at opposing angles provide interest.



Northern elevation depicting the opposing skillion roof form (Source: BPN Design & Access)

Fenestration has been carefully considered, with the placement of a range of window sizes along each elevation assist in breaking up the scale of the building. This is further emphasised by the variety of building materials used throughout the building which include Axon cladding with a painted finish, dry stone cladding and face brickwork. Building signage is modest, integrated within the fabric of the building above the porte cochére to provide direction whilst minimising visual intrusion.

The Community Centre layout is generously proportioned to ensure there is the ability to accommodate all residents and some guests should the occasion demand. The large fireplace located centrally within the eastern wall separates the meals and lounge areas, providing a focus for informal gathering, creating ambience during the cooler months. This area has been designed with capacity to erect petitions should the need arise for smaller spaces.

The commercial scale kitchen located to the south-east of the building can cater to large groups, whilst also retaining the ability to function for smaller scale get togethers. The bar facility is one that will be regularly frequented, with 'happy hour' likely to be a standing engagement for many residents.

The bar has been thoughtfully located to serve patrons located outdoor on the east facing patio area, which provides opportunities for outdoor congregation on sunny days beneath the decorative steel arbor frames. Substantial glazing along the eastern elevation will help bring the outside in, whilst providing access to barbeque facilities, outdoor tables and chairs, and the Community Centre grounds which surround the building.



Conceptual landscaping design for Community Centre grounds (Source: Davidson Design Studio)

A smaller Multi Purpose Room is located to the south of the building, separated from the larger gathering space via double doors. This provides an ideal area for arts and crafts, with appropriate storage and sinks for even the messiest of tasks.

The proposed Community Centre will successfully deliver functional efficiencies that are required for a community of this scale. Key requirements include a Reception area, Manager's Office, associated communications infrastructure and a noticeboard/display area. A Billiards Room is located across from the Reception area, which again will most likely become a focal point of social interaction.

The Community Centre also caters for indoor recreation, providing a gymnasium with equipment which is likely to include stationary bikes, treadmill and weights. The pool pavilion to the west of the Community Centre will provide year-round enjoyment for residents and their guests. There is appropriate area around the margins of the pool for safe circulation and possibly poolside exercise classes, together with dedicated areas for pool plant and storage.

Centrally located amenities accessible from the pool pavilion and the gathering spaces incorporate dedicated male and female facilities, together with unisex facilities for non-ambulatory users.

The Community Centre differs from a conventional community building in that users have the ability to return to their own homes to use facilities with minimal inconvenience. Experience suggests that communal amenities are typically frequented by visitors to the community, rather than residents.

A large Chair Store is proposed to the west of the building, should clear floor space be required for a social dance or activity requiring open area. Adjacent to the Chair Store, a door within the western elevation provides direct access to the Loading Bay for easy access through to the larger recreation area, providing an alternative route for unloading goods for larger functions.

Workshop

An alternative area of congregation within the Village is proposed in the form of a Workshop to the north of the subject land, incorporated within the Caravan/Boat Storage area, separated from the main Village area by the western extension of Ashley Street.

The Workshop will be used for the storage of maintenance equipment and an alternative area for recreation and activity. The Workshop is based broadly on the Men's Shed movement, which has been found to generate positive outcomes towards improving men's physical and mental health and wellbeing. The intention of the Workshop is not to detract from the highly successful Paynesville Men's Shed located to the east of the subject land, within the AJ Freeman Reserve. The proposed Workshop provides a much smaller-scale opportunity for like-minded residents to feel they are making a useful contribution to their community, learning or sharing skills, making friends and networking.

The proposed structure is a simple form with a skillion roof and openings within the three of the four elevations. Natural light will be provided by windows within all except the western elevation, with the building constructed using corrugated Colorbond cladding in Windspray and Ironstone, utilising colours within the broader Village palette.

Internal road and pathway network

The proposed Retirement Village will be serviced by a private network of internal roadways and pedestrian paths to be held in common ownership. Importantly, we note these private roads and pathways will not appear on Council's Roads Maintenance Register, with construction and ongoing maintenance the responsibility of the Developer.

Plans prepared by *Crossco Consulting Pty. Ltd.* provide detail on the internal road network, with pedestrian pathways to be constructed to one side of each street. The development has been master planned to promote pedestrian connectivity, with the expectation being that residents will not be reliant on cars to move around the communal facilities.

Experience in other lifestyle communities indicates that some residents may find it easier to move around the development on a motorised scooter (or golf buggy). Design of the roadways and paths has anticipated this likelihood, with proposed pathways of an appropriate width to accommodate motorised vehicles.

The Proposed Streetscape Sections includes a typical road cross section with a road pavement of approximately 4.8m width, adjoined on each side by 0.6m wide concrete verges to achieve an overall trafficable width of 6m. A custom lower profile rollover kerb will reduce a potential trip hazard to general walking and mobility aids, including seat walkers and mobility scooters. This will complement a 1m wide concrete pathway proposed on one side of every street.

In designing the internal access network, consideration has been given to likely traffic impacts, and how the proposed use will vary from that of typical residential subdivision. The Application is supported by a Traffic Engineering Assessment prepared by SALT³, with anticipated traffic generation informed by empirical data collected from existing Retirement Villages including the Lifestyle Warragul Retirement Village. The Assessment concluded there would be no negative impacts on the overall road network, due to the reduced traffic generation rates associated with the proposed use and development when contrasted against conventional residential style development for which the original road network had been designed.

The proposed internal road network will exceed the requirements of Clause 56.06-8 of the *East Gippsland Planning Scheme* which specifies minimum design requirements for an Access Place. CFA requirements for new roads as specified at Clause 56 will also be exceeded, given appropriate road widths and the requisite height and width clearances necessary to facilitate circulation of an appliance approximately 7.7m long and 3.02m wide. The proposed development has also been designed to accommodate waste collection vehicles approximately 8.8m in length.

The intention behind the design of the internal road and path network is that it would be utilised primarily by residents and visitors of the Retirement Village. Pedestrian connection through the Village for residents and visitors will be provisioned via footpaths, promoting walkability and providing connectivity beyond the Village during daylight hours.

Car Parking

Each villa will be provisioned with a double garage providing covered parking for two vehicles. Driveways are of sufficient length to accommodate a visitor's vehicle parked in the driveway without impacting the circulation of pedestrians or vehicles.

Formal provision for visitor parking is to be provided throughout the development, with dedicated parking areas surrounded by landscaping in locations proximate to the Villas and/or the Community Centre. Five of these parking 'clusters' are proposed, and will achieve a total of twenty-seven visitor parking spaces.



Concept landscaping design for visitor parking areas (Source: Davidson Design Studio)

Based on the parking provision for each villa, together with the anticipated demand for visitor parking, there is considered to be ample parking provision within the Retirement Village. A future section of this Report will provide an analysis of the proposed development within the context of Particular Provisions relating to *Car Parking* (Clause 52.06).

Caravan/Boat Parking

In other Retirement Villages there is a common theme for residents to take the opportunity to invest their time in other lifestyle pursuits such as caravanning or boating. In response to this likely demand, the proposed development includes provision for the parking of fifteen large caravans or boats to the north of the site, on the northern alignment of the Ashley Street extension, directly opposite the Ashley Street secondary egress gate.

The Caravan and Boat Parking area has been designed by Crossco Consulting to ensure the layout is functional for large vehicles. This parking precinct is predominantly screened from view through the placement of the Workshop, associated fencing and landscaping treatments.



Conceptual landscaping surrounding Caravan/Boat storage (Source: Davidson Design Studio)

For security purposes, a 1.8m high fence with sliding gate will adjoin the southern boundary of the storage area, with a consistent theme to that proposed for external fencing of the balance of the Village. Allocation of parking spaces and access to this area will be overseen by management.



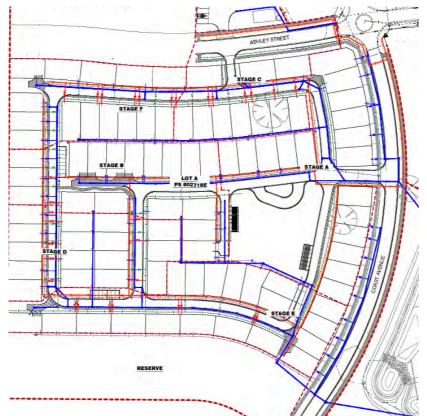
Proposed fencing detail for Caravan/Boat Storage area (Source: Davidson Design Studio)

External road network

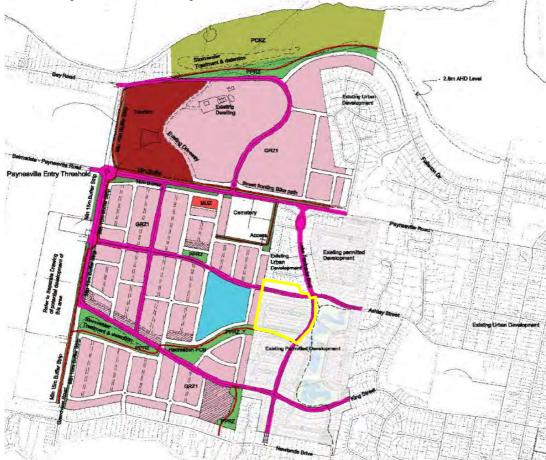
The proposed development will require the extension of the surrounding road network to provide additional access beyond the limited frontage currently provided at the intersection of Coast Avenue and Ashley Street.

Coast Avenue will be extended for the length of the eastern boundary of the subject land, whilst Ashley Street will be extended in a westerly direction to a distance of approximately 10m beyond the proposed secondary access to the Retirement Village.

Plans prepared by Crossco Consulting detail the extent of roadworks proposed, and provide typical sections of each of the proposed extensions, both of which incorporate footpaths on both sides of a 20m wide road reserve.



Extract from Services Layout Plan (Source: Crossco Consulting, Dwg. No. 2355/006-A) The proposed roadworks also ensure the development will remain consistent with the strategic outcomes expected by the Paynesville Growth Area Structure Plan (July 2016), and will enable the balance of the Paynesville Park estate to be developed in accordance with the endorsed plans, retaining the same



network of connector roads and reserves and preserving expectations of permeability and connectivity.

Extract from Figure 2: Paynesville Growth Area – Preferred Urban Structure, with subject land outlined in yellow (Source: Paynesville Growth Area Structure Plan, p.15)

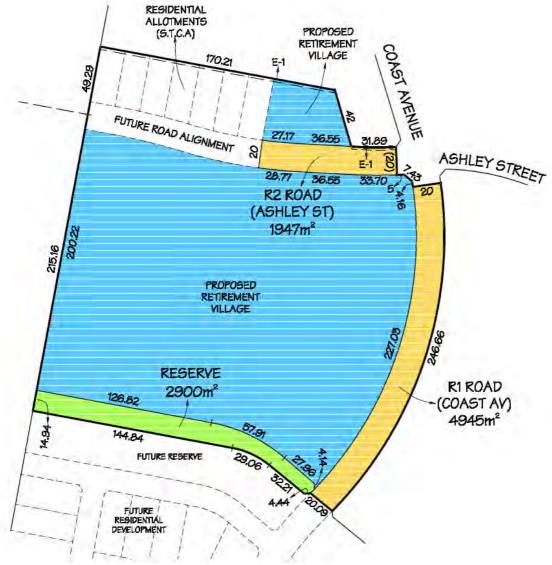
Subdivision

To enable the proposed public infrastructure to vest with Council, the subject Application incorporates subdivision to create the following:

- A section of Road Reserve ('R1'), being the southern extension of Coast Avenue, with an area of approximately 4,945m²
- A further section of Road Reserve ('R2'), being the western extension of Ashley Street, with an area of approximately 1,947m²; and
- A section of Reserve to the south of the site approximately 2,900m253 in area, that forms part of a larger Reserve expected to be delivered as part of the broader Paynesville Park estate, providing drainage and pedestrian connectivity to the greenfield site adjoining the subject land to the west.

The resultant balance allotment, with an area of approximately 5.753ha will contain the proposed Retirement Village development, together with a vacant area of residentially zoned land available for future development subject to further Council approval.

Please find enclosed a Proposed Subdivision Plan which depicts the proposed subdivision layout for the development. A Design Response Plan has also been prepared to demonstrate how the balance of the site may be developed in accordance with the strategic vision for this precinct.



Extract from Design Response Plan

We confirm that subdivision of the individual villas does not form part of the proposal. Whilst indicative boundaries are shown on the Proposed Site Plan (Sheet 2 of 9), these have been included to provide a representation of likely fencing to demonstrate each villa will be appropriately separated and provided with private open space.

Staging

The development of the Retirement Village is proposed to be undertaken in stages, to facilitate progressive and orderly development. The delivery of public infrastructure is also proposed to be staged.

The following table outlines those allotments which will be contained in each of the ten stages as nominated.

Lots to be created
Villas 9-20*, 70-74*, Community Centre and Coast Avenue extension
Villas 37-39*, 43-46*, 55-56*, 75-79* and 82-84*
Villas 6-8*, 63-69* and Ashley Street extension
Villas 33-36*, 47-54*, 80-81*, 85 & 93, Workshop and Caravan/Boat Storage area
Villas 21-32*, 86-92* and Reserve
Villas 1-5*, 40-42* and 57-62*

* inclusive of Lot numbers nominated herein

We respectfully request that the Conditions on Planning Permit be written in a manner that will enable the staged issue of a Statement of Compliance allowing for the progressive construction and vesting of public infrastructure.

4. Application Triggers

The subject Application triggers consideration of the following Clauses of the *East Gippsland Planning Scheme:*

- Use of a Retirement Village in accordance with Clause 32.08-2 of the General Residential Zone;
- Buildings and Works associated with a Section 2 use (Retirement Village) in accordance with Clause 32.08-9 of the *General Residential Zone*;
- Subdivision of land in accordance with Clause 32.08-2 of the *General Residential Zone*;
- Subdivision of land in accordance with Clause 43.02-3 of the *Design and Development Overlay*; and
- Display of business identification signage in accordance with Clause 52.05-13 of the Particular Provisions relating to *Signs*.

5. Request to end Agreement AQ868619Y

In addition to the application triggers as described above, we acknowledge the proposal will require the ending of Agreement AQ868619Y.

Agreement AQ868619Y ('the Agreement') was registered on the parent title of the subject land prior to the registration of the Plan of Subdivision that created the subject land and related titles contained within Stage 2 of the Paynesville Park estate.

We understand the purpose of the Agreement was to ensure consistency between two separate Planning Permits issued for the subject land; Planning Permit 583/2004/P/A which approved the subdivision of the Coast estate, and Planning Permit 94/2007/P which approved a two lot subdivision to facilitate the staged purchase of the entire property as part of a terms contract between the Vendors, the Ah Yee family, and the former Developer of the Estate.

An earlier version of the Agreement was executed in 2007 in accordance with Condition 2 on Planning Permit 94/2007/P which sought to establish a connection to the broader approval granted by Planning Permit 583/2004/P/A. The Agreement sought to ensure future development is consistent with the configuration, layout and staging reflected in the plans endorsed under Planning Permit 583/2004/P/A as amended from time to time, except with the prior written consent of Council.

We are advised that contractual arrangements were not honoured by the former Developer, with the Vendors subsequently entering a Contract of Sale with Paynesville Park Pty. Ltd. Paynesville Park Pty. Ltd. has now secured the land and are delivering the approved development in accordance with Planning Permit 583/2004/P/D.

With Council's consent, Paynesville Park Pty. Ltd. executed an updated Agreement to provide greater flexibility for all parties moving forward, and to reflect the amendments to Planning Permit 583/2004/P/D.

The subject Application now proposes a change in direction away from that anticipated by the Agreement, which will not be considered as an amendment to Planning Permit 583/2004/P/D as amended by Council. On that basis, the subject Application represents a new direction that requires the ending of the Agreement as it applies to the subject land.

A request to end the Agreement pursuant to Section 178A(1)(b) of the *Planning* & *Environment Act 1987* will be made shortly, with the hope this request can be considered in parallel to the determination of the Planning Application.

Whilst the proposed development represents an outcome not anticipated by the Agreement, the primary intent of the Agreement is maintained by the modified proposal, namely those critical elements of the development that have an impact on the orderly development of the precinct.

This includes the extension of Ashley Street and King Street, the latter being unrelated to the subject application), the delivery of drainage infrastructure with the reserve to the east of the subject land (also unrelated), and the proposed Reserve that is partly included within the southern portion of the subject land, that provides drainage and pedestrian connectivity to the adjacent greenfield site.

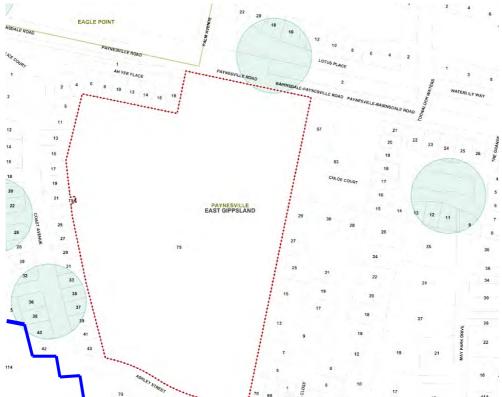
It is our expectation that should Council determine the subject Application favourably, that a new Agreement would be required as a Condition of Permit to ensure the requirement for these elements remain a clear expectation in perpetuity.

6. Cultural Heritage

The proposed use is a high impact activity, with part of the subject land identified as being of cultural heritage sensitivity. The subject land is within 50 metres of a registered Cultural Heritage site which was identified by Joanna Freslov as part of monitoring during the construction of the first stage of The Coast development in 2007.

We understand that Joanna was provided with a box of artefacts found during construction, and a rough indication of the likely location. The site was recorded, incorporating a 50m radial span in accordance with the reporting requirements.

Until recently, mapping of this site was limited to the circular 50m shape, as indicated by the following diagram.



Extract from Cultural Sensitivity mapping circa 2016, with north-western boundary of the subject land indicated by blue line (Source: Planning Maps Online)

More recently, the extent of sensitivity has been drastically expanded to include a much larger area, depicted as follows.



Extract from current Cultural Heritage Sensitivity mapping (Source: VicPlan)

We enquired with Aboriginal Victoria ('AV') to understand the reasoning behind the substantial increase in sensitivity mapping. Kate Morton of AV advised us that a recent program of mapping updates has been undertaken to ensure the full extent of a site is recorded, and that is why this particular area has seen an increase in sensitivity.

A search of the ACHRIS database for this particular site includes photography that shows significant ground disturbance underway across the area of sensitivity. This significant ground disturbance included the removal of native vegetation, the construction of Smallman Court, Digney Street, the southern extent of Coast Avenue, the installation of reticulated services and planting of street trees, with further disturbance associated with the construction of dwellings on each of the residential allotments created by the subdivision.



Existing developed conditions circa December 2019 (Source: Google Earth)

Pursuant to Regulation 25(3) of the *Aboriginal Heritage Regulations 2018*, this irrefutable significant ground disturbance means that part of the subject land that is within 50 metres of the registered cultural heritage place would no longer be deemed an area of cultural heritage sensitivity.

Accordingly, the subject Application does not trigger the preparation of a Cultural Heritage Management Plan in accordance with the provisions of the *Aboriginal Heritage Act 2006*.

7. Planning Policy

State and Local Planning Policy is addressed below in support of the proposed development.

7.1 Planning Policy Framework

The subject application is entirely consistent with statements contained within the SPPF relating to *Settlement* which seek to promote a high standard of urban design and amenity whilst delivering sustainable and economically viable development (Clause 11). Residential development that maximises choice, promotes social interaction and improves accessibility within defined settlement boundaries is actively encouraged (Clause 11.01S, Clause 11.03-4S, Clause 16).

The proposal responds soundly to Policy relating to *Housing* and *Planning for growth areas* which seek to increase overall residential densities in well planned developments (Clause 16, Clause 11.02-2). The subject Application will achieve a residential density of approximately 13.8 dwellings per net developable hectare, and provides a direct response to the distinctive characteristics and needs of the locality.

The high quality design themes used throughout the Village, including building materials, landscape design and proposed fencing details will all contribute to enhanced amenity outcomes, consistent with objectives relating to *Building Design* (Clause 15.01-2S). The development will deliver a safe and attractive space when viewed from both within and outside the facility. The Village layout is connected, safe, pleasant and attractive, and incorporates amenities to support physical activity in all weather conditions, supporting strategies relating to *Healthy neighbourhoods* (Clause 15.01-4S).

Policy statements specific to *Gippsland* (Clause 11.01-1R) seek to strengthen the region's economic resilience by adapting and responding to the changing market conditions and likely population growth. The proposal is entirely consistent with objectives that aim to deliver vibrant and prosperous town centres.

7.2 Local Planning Policy

The subject Application is entirely consistent with strategies and objectives contained within Local Policy relating to *Housing* that promote East Gippsland as an ideal retirement destination, providing diverse, accessible and affordable housing opportunities (CI. 21.08).

The proposal responds positively to Clause 21.03 relating to *Settlement* in that it seeks to provide diversity and choice to the market, making the best use of existing investment in infrastructure (Cl. 21.03). Medium density development within an appropriately zoned location with access to the full suite of reticulated services is an ideal outcome for the site within the context of objectives relating to *Planning for Growth Areas* (Cl. 21.03-1).

Policy relating to *Economic Development* acknowledges the value to the region of the retiree market, and seeks to encourage development that caters to both active retirees and the elderly (Cl. 21.09).

Strategies specific to *Paynesville* (Clause 21.12) identify Paynesville as an attractive retirement area, and highlight the need to provide for an ageing population.

Strategic Planning for the precinct associated with the *Paynesville Growth Area Structure Plan, June 2016* ('PGASP') has identified the lifestyle appeal of the precinct for retirees. Retirement living is an anticipated outcome for the growth area, as it is considered complimentary to more conventional residential development.

PGASP contains specifies objectives and requirements which identify the need to accommodate housing for retirees in appropriate locations, with which the subject Application is entirely consistent having regard for the following:

- The subject land is located immediately adjacent to a connector road (Ashley Street), with immediate access to bus routes which service the local community.
- The subdivision layout demonstrates how the proposed development has strong integration with the wider urban structure with vehicle and pedestrian connections at multiple points.

The proposal retains appropriate regard for the strategic vision of PGASP and the planned future connectivity to adjoining land to the west.

The subject Application represents a sound Planning outcome which is well supported by both State and Local Planning Policy Frameworks.

8. Planning Elements

8.1 General Residential 1Zone

The proposed Retirement Village is entirely consistent with the purpose of the General Residential Zone ('GRZ') in that it seeks to deliver variety in accommodation type to meet the varying needs of households, whilst remaining respectful of the prevailing neighbourhood character (Clause 32.08).

The subject Application provides a style of development that is in growing demand throughout the municipality, providing opportunity to accommodate an ageing population whilst promoting housing affordability.

The subject land is not isolated, being a short stroll from the commercial precinct of the Paynesville. The property is well located to enable residents to make good use of existing community and recreational facilities that are not addressed by extensive facilities provided within the Retirement Village.

Consideration of the provisions relating to subdivision are somewhat limited, given the proposal does not seek to create any additional vacant allotments. The intent of the subdivision is to facilitate the future delivery of key pieces of public infrastructure required for the orderly and progressive development of the precinct. The following analysis provides a response to the requirements of Clause 56, albeit it has limited relevance to the case at hand.

Objective	Design Response
56.01 Subdivision Design & Site Context Description	Complies: The subdivision layout has been carefully considered to maximise the functional use of the subject land, having regard for the existing and intended use of adjoining land. The enclosed Staging Plan demonstrates the ability for the development to be undertaken incrementally without negative impacts on adjoining uses.
56.02 Policy Implementation	Complies: The proposal positively responds to State and Local Policy objectives that promote affordable housing, access for all and high quality urban design.
56.03.1 Compact & walkable neighbourhoods	Complies: The development has been designed to promote walkability, with strong pedestrian connections throughout encouraging residents to leave their cars in the garage, walking throughout the development or into the town centre which is approximately 1.6km by foot from the subject land, which is a comfortable stroll.

Objective	Design Response
56.03-2 Activity Centres	Complies: The subject land is well located, close to community and educational facilities, with easy access to an arterial road. The inclusion of 93 additional residences into the Paynesville community will help inject vitality into existing commercial and community facilities.
56.03-3 Planning for community facilities	Complies: Whilst residents of the Retirement Village will have many opportunities for passive and active recreation on site, many community groups and facilities outside the side will enjoy increased patronage. The developer has specifically excluded facilities such as Lawn Bowls and Tennis in the hope that existing community groups will enjoy the benefits of increased membership. Anecdotally we have found residents are recruited to join Walking Groups, Golf Club, CWA and local Service Clubs, contributing positively to community facilities.
56.03-4 Built Environment	Complies: The development will be safe, functional and attractive, responding positively to the evolving character of the precinct. Proposed landscaping and community facilities available for residents and their guests help promote a sense of identity and belonging.
56.04-1 Lot design & diversity	Complies: The development proposes construction at a medium density to take advantage of the unconstrained landform and proximity to community facilities and arterial road network. Three distinct villa types provide diversity and market choice, whilst delivering a compact, walkable neighbourhood.
56.04-2 Lot area and building envelopes	Complies: The enclosed villa plans demonstrate that each of three villa types can be accommodated on any of the proposed sites, with appropriate area for private open space, safe vehicle manoeuvres and car parking, whilst promoting energy efficient design.
56.04-3 Solar orientation of lots	Complies: The design of the villas has essentially dictated the Village layout. Villa sites are regular in shape to allow for simple building forms as proposed. Each of the three proposed villa types have been designed to ensure appropriate solar access, whilst still maintaining a strong sense of address.
56.04-4 Street orientation	Complies: Social interaction and safety are key features of the proposed development, with villas designed with a strong address to the internal street network to promote surveillance and visibility. Proposed areas of open space have been designed to ensure opportunities for surveillance and congregation by residents.

Objective	Design Response
56.04-5 Common Areas	Complies: The internal road and path network, areas of landscaping and the Community Centre will be retained as common areas. Public access through the development, via foot or vehicle is not discouraged during daylight hours, with further limitations during the evening by virtue of a security gate.
56.05-1 Integrated urban landscape	Complies: A landscaping theme will run throughout the village including common areas and front gardens, as depicted on the Landscape Master Plan prepared by Davidson Design Studio. Landscaping will be regularly maintained by a management, ensuring appropriate presentation and lack of weeds at all times.
56.05-2 Public open space provision	Complies: The Application proposes public open space provision in the order of 4.3% of the total site area. This provision is over and above previous contributions of land provided by earlier stages of development within the Estate.
56.06-1 Integrated mobility	Complies: The unconstrained and even landform of the site ensures there are no obstacles for people of all abilities to move around the site without the need for a vehicle.
56.06-2 Walking and cycling network	Complies: The internal road and path network will be restricted in speed to ensure all users remain safe. Pedestrian paths are all well connected to ensure functional and safe movement throughout the Community, with strong surveillance from all villas.
56.06-3 Public transport network	Complies: The subject land is well located close to arterial routes, with limited public transport available.
56.06-4 Neighbourhood street network	Complies: The extension of Coast Avenue and Ashley Street has been designed in accordance with Standard C17. The internal road network has been designed having regard for the relevant standards and requirements of Council and the CFA, however we note the roads are private in nature, and will not appear on Council's Roads Maintenance Register.
56.06-5 Walking and cycling network detail	Complies: The proposed path network will be entirely consistent with requirements for all abilities access.
56.06-6 Public transport network detail	Complies: The proposal will utilise existing provision within the precinct.
56.06-7 Neighbourhood street network detail	Not Applicable: The internal road network has been designed having regard for the relevant standards and requirements of Council and the CFA, however we note the roads are private in nature, and will not appear on Council's Roads Maintenance Register.
56.06-8 Lot access	Complies: The proposed roads have been designed to exceed the standard requirements for an Access Place. There are considered to be no issues arising.

Objective	Design Response
56.07-1 Drinking water supply	Complies: Drinking water will be supplied to the satisfaction of East Gippsland Water.
56.07-2 Reused and recycled water	Complies: Subject to the preference of the individual resident, each villa will have the ability to erect a rainwater tank.
56.07-3 Wastewater management	Complies: The proposed development will be connected to reticulated sewer and constructed to the satisfaction of East Gippsland Water.
56.07-4 Urban run-off management	Complies: Stormwater drainage will be undertaken in accordance with best practice principles, as detailed in the Stormwater Management Strategy prepared by Crossco Consulting. Landscaping will include water sensitive urban design features including rain gardens to treat water quality prior to discharge. Each villa will have a 2,000L rainwater tanks plumbed in for reuse, which will further reduce the extent of run-off.
56.08-1 Site management	Complies: The site will be carefully managed during construction to ensure no adverse effects on adjoining properties. We anticipate a Condition on Permit that will require the preparation and approval of a Construction Management Plan prior to the commencement of works.
56.09-1 Shared trenching	Complies : The Services Layout Plan designed by Crossco Consulting demonstrates how shared trenching will be utilised wherever possible.
56.09-2 Electricity, telecommunications and gas	Complies: Each lot will be provisioned with the full suite of services via reticulated means. Individual residents will have the ability to connect to solar power should they so desire.
56.09-3 Fire hydrants	Complies: Fire fighting infrastructure will be installed in accordance with the standard requirements of the CFA.
56.09-3 Public lighting	Complies: Street lighting is proposed, with additional lighting around the Community Centre and to the entry of the Retirement Village to ensure full visibility of security keypads.

Whilst the subject Application does not require formal consideration of the requirements of Clause 55, we offer the following summary which demonstrates overall compliance with the Standards and Objectives of the Clause.

• The proposed development is respectful of both the evolving neighbourhood character to the north and east of the subject land, and the established neighbourhood character further to the east and south. The broader precinct is dominated by single storey, brick veneer dwellings with double garages.

- By providing a choice of villa types, brick colour and façade type, the character of the development will strike a balance between diversity and uniformity. The addition of landscaping will help in delivering a cohesive rhythm to the proposed streetscape.
- Each villa will have a similar presentation to the street by virtue of the 5.2m setback to the garage from either the back of footpath or the back of kerb.
- Proposed levels of site coverage and site permeability are within acceptable allowances.
- All villas have been designed to achieve mandatory energy rating standards.
- The location and provision of car parking addresses the requirements of the standard, and in many instances will exceed the minimum requirements.
- Side and rear setbacks provide a consistent rhythm, with no issues relating to overshadowing or overlooking.
- No front fences are proposed.

The proposal achieves a sound Planning outcome that responds positively to the requirements of the General Residential Zone.

8.2 Design and Development Overlay

The subject land is included within Design and Development Overlay (Schedule 14) relating to *Residential Development in Coastal Settlements: Paynesville*. The proposed buildings and works are exempt from the need to obtain a Planning Permit given none of the proposed structures have a height exceeding 7.5 metres above natural ground level.

The subdivision of the subject land triggers consideration of Clause 43.02-3 of the Header Clause to the Design and Development Overlay. We note there are no triggers within Schedule 14 relating to subdivision, however there are Decision Guidelines to which we provide the following response:

- Considerations relating to subdivision have limited relevance to the case in hand, given the proposal seeks only to create areas of road and reserve.
- The proposal will not have any detrimental effect on the environmental and landscape values of the site. The subject land does not contain any streamlines, foreshores, wetlands, areas of remnant vegetation (not already offset and approved for removal), areas prone to erosion or sites of cultural or heritage significance.
- The subdivision layout promotes walkability, establishing vehicular connections to the north and east, and pedestrian connections to the north, east and south and throughout the village.
- There are no wildlife corridors either within or adjacent to the subject land. There are no implications for native vegetation.
- The elevated position and setback of approximately 700m from the foreshore ensures the subject land will not be impacted by coastal processes, even in a sea level rise scenario.
- The subdivision layout responds positively to the established urban character, and has been designed in accordance with current and future land uses.
- The proposed built form represents high quality design, with complementary landscaping and coastal colour palette ensuring an aesthetically pleasing presentation throughout.

The subject Application achieves a sound Planning outcome that is consistent with the design objectives for the precinct.

8.4 Particular Provisions

Signage (Clause 52.05)

The subject Application requires Planning consideration for the display of business identification signage, for the two signage elements integrated within the fencing detail presenting to Coast Avenue.

Medium limitations on signage are imposed within the General Residential Zone, classified as Category 3 – High Amenity areas at Clause 52.05-13. A Planning Permit is required for the display of business identification signage, with no condition imposed on the extent of signage permissible.

The minimal extent of signage affixed above the Community Centre entry, below the porte cochere on the northern elevation is considered to benefit from the exemption at Clause 52.05-10, dot point 9, being signage inside a building that cannot generally be seen outside. The orientation of the sign, the generous setback of the Community Centre building from Coast Avenue, and the visual interruption provided by proposed villas, gates, fencing and landscaping will prevent views of this signage from outside the subject land.

Consideration is therefore limited to the two 3.1m² (3.1m wide by 1m high) signage panels affixed to the eastern fence with frontage to Coast Avenue, overlooking the drainage and recreation reserve on the eastern side of Coast Avenue. The signs are minimal in scale, with no illumination proposed, and are not proposed as separate free-standing structures, thus avoiding visual clutter.

The proposed signage will not have a negative impact on road safety, positioned well out of the driver's view of the intersection with no features that could dazzle or distract.

Stormwater Management (Clause 53.18)

The proposed development has been designed to comply with the requirements of Clause 53.18 relating to *Stormwater Management in Urban Development*.

The Application is supported by a Stormwater Management Strategy prepared by Crossco Consulting, informed by the approved Surface Water Management Strategy and Functional Design of Wetland/Retarding System prepared by Neil Craigie & Associates in 2008.

Going above and beyond the methods anticipated by the Craigie wetland, the proposed development will incorporate the substantial measures for onsite detention and reuse, including a 52,000L subsurface tank, a 2,000L rainwater tank to each villa, plumbed in for toilet flushing and irrigation, and a 5,000L rainwater tank to the workshop, to be used for irrigation.

Section 7 of the Crossco report provides a direct response to the objectives and standards of Clause 53.18, and confirms the proposal will comply with the requirements of the Clause.

Car Parking (Clause 52.06)

The subject Application proposes the allocation of 186 car parking spaces within garages attached to individual villas, with each villa provided with a double garage.

This provision is entirely consistent with the requirements of Table 1 to Clause 52.06-5 which prescribes the following parking provisions for a Residential Village:

- 1 parking space to each one or two bedroom dwelling; and
- 2 parking spaces to each three or more bedroom dwelling

Given our Client's need to retain flexibility in villa type, for the purposes of this exercise we have presumed a worst case scenario, namely that each allotment is developed with either 'Admiral' or 'Lieutenant' villa types which contains three bedrooms.

Table 1 also prescribes the provision of 1 visitor parking space for every five dwellings for developments containing more than five dwellings. As the subject Application seeks to develop 93 dwellings, the proposal requires the provision of 19 parking spaces for visitors. Excluding parking provision immediately adjacent to the Community Centre, the provision of 27 dedicated visitor parking spaces located throughout the Village will exceed the statutory requirement.

We anticipate that many visitors will take opportunity to park in a 'piggy back' style arrangement within the driveways of the individual villas they are visiting. This practical use will further reduce the demand for formalised visitor parking.

Consideration of parking requirements relating to the Community Centre are premised upon the use of the facility being limited to residents and their guests. As the Community Centre is entirely ancillary to the primary use of the subject land for the purposes of a Residential Village, it is considered that there will be no additional parking demand generated by this complimentary facility. Nonetheless, the provision of twelve parking spaces within the grounds of the Community Centre will address any additional parking demand.

The proposed development will easily accommodate all demand for car parking on site. There are considered to be no issues arising.

Bicycle Facilities (Clause 52.34)

Clause 52.34 requires the provision of facilities for bicycle parking for both residents and visitors.

Ample opportunity for the storage of resident's bicycles exists within garages and private yard areas associated with each villa.

Provision will be made for the parking of visitors' bicycles through the placement of a bicycle rail to the north of the Community Centre.

There are considered to be no issues arising.

9. Conclusion

The proposed Retirement Village at 91 Coast Avenue, Paynesville is considered to accord with all relevant provisions of the General Residential Zone and Design & Development Overlay of the *East Gippsland Planning Scheme*. The proposal is entirely consistent with State and Local Policy and has been designed to complement the adjoining properties and respond to the growing needs of the municipality.

For these reasons we respectfully request that Council consider the merits of the Application favourably and resolve to issue a Planning Permit.

Crowther & Sadler Pty. Ltd. For and on behalf of Paynesville Park Pty. Ltd.



Copyright State of Victoria. This publication is copyright. No part may be reproduced by any process except in accordance with the provisions of the Copyright Act 1968 (Cth) and for the purposes of Section 32 of the Sale of Land Act 1962 (Vic) or pursuant to a written agreement. The information is only valid at the time and in the form obtained from the LANDATA REGD TM System. None of the State of Victoria, LANDATA REGD TM System, Victorian Land Registry Services Pty. Ltd. ABN 86 627 986 396 as trustee for the Victorian Land Registry Services Trust ABN 83 206 746 897 accept responsibility for any subsequent release, publication or reproduction of the information.

REGISTER SEARCH STATEMENT (Title Search) Transfer of Land Act 1958

Page 1 of 1

VOLUME 11985 FOLIO 148

Security no : 124085130712V Produced 26/08/2020 02:06 PM

LAND DESCRIPTION

Lot A on Plan of Subdivision 802718E. PARENT TITLE Volume 11974 Folio 122 Created by instrument PS802718E 31/05/2018

REGISTERED PROPRIETOR

Estate Fee Simple Sole Proprietor PAYNESVILLE PARK PTY LTD of 152 MACLEOD STREET BAIRNSDALE VIC 3875 PS802718E 31/05/2018

ENCUMBRANCES, CAVEATS AND NOTICES

MORTGAGE AS665402Q 30/10/2019 CURRY SECURITIES PTY LTD

Any encumbrances created by Section 98 Transfer of Land Act 1958 or Section 24 Subdivision Act 1988 and any other encumbrances shown or entered on the plan set out under DIAGRAM LOCATION below.

AGREEMENT Section 173 Planning and Environment Act 1987 AQ868619Y 28/03/2018

DIAGRAM LOCATION

SEE PS802718E FOR FURTHER DETAILS AND BOUNDARIES

ACTIVITY IN THE LAST 125 DAYS

NIL

-----END OF REGISTER SEARCH STATEMENT-----

Additional information: (not part of the Register Search Statement)

Street Address: 91 COAST AVENUE PAYNESVILLE VIC 3880

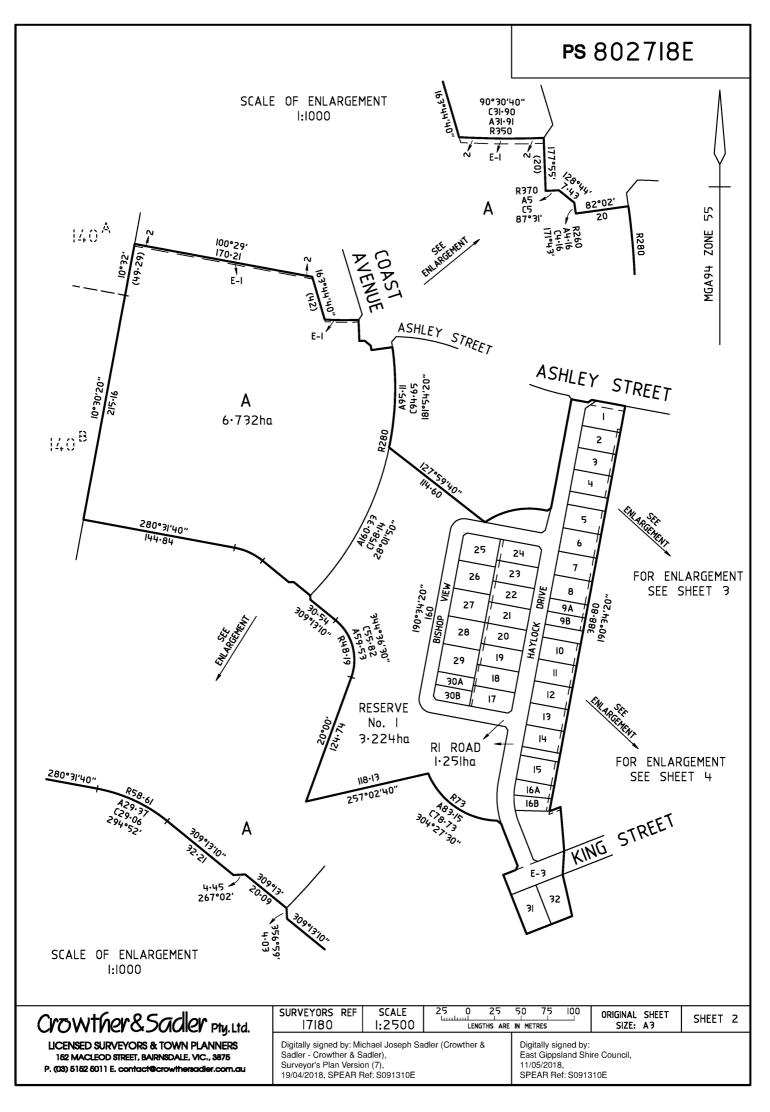
ADMINISTRATIVE NOTICES

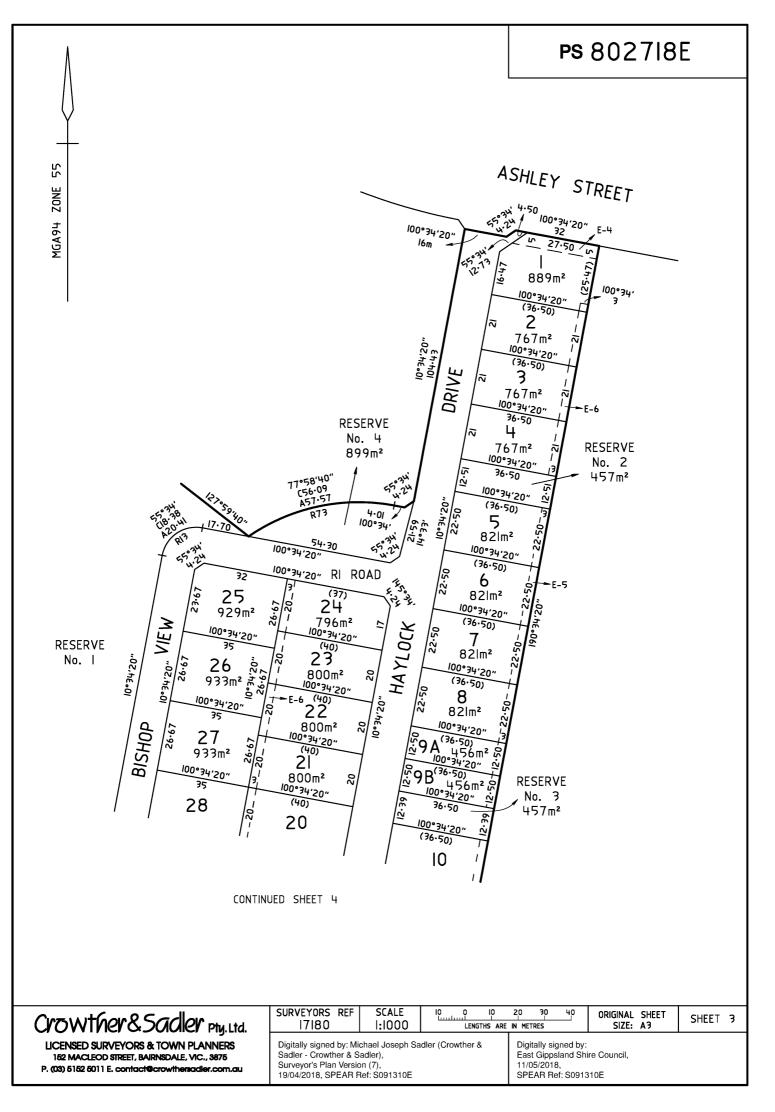
NIL

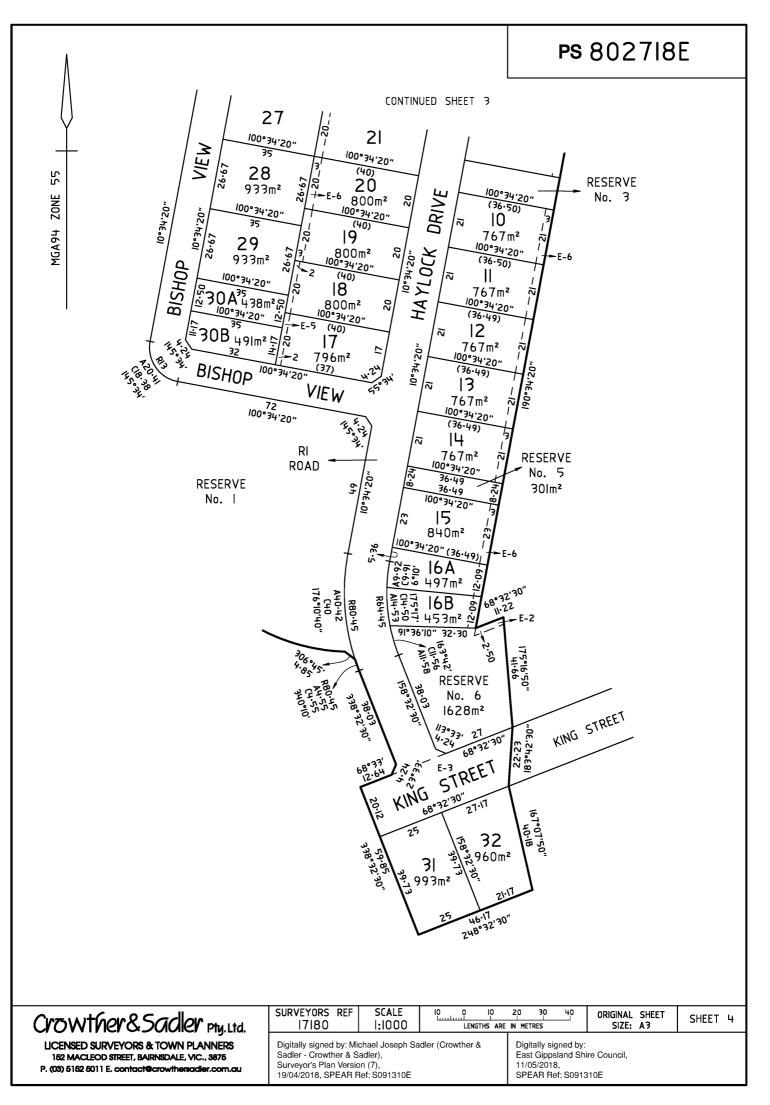
eCT Control 20396F MICHAEL BENJAMIN & ASSOCIATES Effective from 30/10/2019

DOCUMENT END

P	LAN OF SUBDIVI	SION		EDITION 1	PS {	3027I8E
LOCATIO	N OF LAND			Council Name: East Gippsl	and Shire Council	
PARISH:	BAIRNSDALE			Council Reference Number: PS802718E		
TOWNSHIP:				Planning Permit Reference: 583/2004/P/C SPEAR Reference Number: S091310E		
SECTION:				Certification		
CROWN ALL	OTMENT: 141, 141 ^A & 141 ^B (1	PART)			section 11 (7) of the Subdivi under section 6: 04/07/201	
CROWN POP				Public Open Space		
TITLE REFER	RENCE: VOL 11974 FOL 12	2		A requirement for public open space under section 18 of the Subdivision Act 1988 has not been made		
LAST PLAN F	REFERENCE: LOT - PS802715	L		Digitally signed by: Martin T Ireland for East Gippsland Shire Council on 11/05/2018		
POSTAL ADE				Statement Of Compliance issued: 11/05/2018		
(at time of sul						
MGA CO-ORI (of approx ce in plan)		ZONE: GDA 94				
	VESTING OF ROADS AND/OR RE				NOTATION	S
RI ROAD RESERVE No	. I EAST GIPPSLAND S	HIRE COUNCIL				
RESERVE No RESERVE No						
RESERVE No RESERVE No						
RESERVE No	. 6 EAST GIPPSLAND S	HIRE COUNCIL				
DEPTH LIMITATION	DOES NOT APPLY					
Planning Permit	staged subdivision. No. 583/2004/P/C s been connected to permanent marks urvey Area No.	: No(s). 444				
		EAS		NFORMATION		
.egend: A -	Appurtenant Easement E - Encumb	ering Easement		umbering Easement (Road)		
Easement Reference	Purpose	Width (Metres)	Ori	igin	Land Benefited	∕In Favour Of
E-I	SEWERAGE	2	PS80271	5L EAST	GIPPSLAND REGION WAT	TER CORPORATION
E-2	SEWERAGE	2.20	PS31360	6S LAND	IN PS313606S	
E-3	WAY	20.12	PS80271	ISL LOT 2	LOT 2 ON PS802715L	
E-4	DRAINAGE	5 THIS PL		AN EAST	EAST GIPPSLAND SHIRE COUNCIL	
E-5	SEWERAGE	SEE DIAG.	THIS PL	AN EAST	GIPPSLAND REGION WAT	TER CORPORATION
E-6	DRAINAGE & SEWERAGE	3	THIS PL		GIPPSLAND REGION WAT GIPPSLAND SHIRE COUN	
Crow	Ther & Sadler pty. Ltd.	SUR	RVEYORS FILE	REF: 17180	ORIGINAL SHEET SIZE: A3	SHEET I OF 4 SHEETS
LICENSED 152 MACL	SURVEYORS & TOWN PLANNERS EOD STREET, BAIRNSDALE, VIC., 3875 011 E. contact@crowthersadler.com.au	Sadler - Crov Surveyor's P	ed by: Michael wther & Sadler) lan Version (7), SPEAR Ref: S0	-	PLAN REGIST TIME: 9:03 A C. GROS Assistant Reg	AM DATE: 31/05/2018 SO







Delivered by LANDATA®, timestamp 26/08/2020 14:07 Page 1 of 10

. . .

© State of Victoria. This publication is copyright. No part may be reproduced by any process except in accordance with the provisions of the Copyright Act 1968 (Cth) and for the purposes of Section 32 of the Sale of Land Act 1962 or pursuant to a written agreement. The information is only valid at the time and in the form obtained from the LANDATA® System. None of the State of Victoria, LANDATA®, Victorian Land Registry Services Pty. Ltd. ABN 86 627 986 396 as trustee for the Victorian Land Registry Services Trust ABN 83 206 746 897 accept responsibility for any subsequent release, publication or reproduction of the information.

AQ868619Y

Application by a responsible authority for the making of a recording of an agreement Section 181 Planning and Environment Act 1987

Privacy Collection Statement

The information in this form is collected under statutory authority and used for the purpose of maintaining publicly searchable registers and indexes.

Lodged by Name: PLANOLOGY Phone: 0430453372 Address: PO BOX 394, IVANHOE VIC 3079 Reference: MN3242 Customer code: 21179J

The responsible authority having made an agreement referred to in section 181(1) of the Planning and Environment Act 1987 requires a recording to be made in the Register.

Land:(volume and folio)

VOLUME 11867 FOLIO 224

Responsible authority:(full name and address, including postcode)

EAST GIPPSLAND SHIRE COUNCIL, 273 MAIN STREET, BAIRNSDALE VIC 3875

Section and act under which agreement is made:

SECTION 173 OF THE PLANNING AND ENVIRONMENT ACT 1987

A copy of the agreement is attached to this application:

YES

Signing:

35271702A 181PEA Page 1 of 2 **THE BACK OF THIS FORM MUST NOT BE USED** Land Use Victoria contact details: see www.delwp.vic.gov.au/property>Contact us . .

~ -

AQ868619Y

Application by a responsible authority for the making of a recording of an agreement Section 181 Planning and Environment Act 1987

Privacy Collection Statement

The information in this form is collected under statutory authority and used for the purpose of maintaining publicly searchable registers and indexes.

Certifications			
1.The Certifier has take	en reasonable steps to verify the identity of the applicant.		
	2. The Certifier holds a properly completed Client Authorisation for the Conveyancing Transaction including this Registry Instrument or Document.		
3.The Certifier has reta	ined the evidence supporting this Registry Instrument or Document.		
4.The Certifier has taken reasonable steps to ensure that this Registry Instrument or Document is correct and compliant with relevant legislation and any Prescribed Requirement.			
Executed on behalf of	EAST GIPPSLAND SHIRE COUNCIL		
Signer Name	DARREN WONG		
Signer Organisation	PLANOLOGY PTY LTD		
Signer Role	AUSTRALIAN LEGAL PRACTITIONER		
Signature	Bound		
Execution Date	22.03.2018		

35271702A 181PEA Page 2 of 2 THE BACK OF THIS FORM MUST NOT BE USED Land Use Victoria contact details: see www.delwp.vic.gov.au/property>Contact us ,



1

Agreement under section 173 of the Planning and Environment Act 1987

69 Ashley Street, Paynesville

Information table

Date of Agreement: 33 (2 (2018

Parties:

Name	East Gippsland Shire Council
Short form name	Council
Notice details	273 Main Street, Bairnsdale, Vic, 3875

Name	Paynesville Park Pty Ltd
Short form name	Owner
Notice details	Suite 1, 29 Access Way, Carrum Downs 3201

Background:

- A Council is the responsible authority for the administration and enforcement of the Planning Scheme under the Act.
- B The Subject Land is subject to the Planning Scheme.
- C The Owner is the registered proprietor of the Subject Land.
- D On 6 July 2007, Council and the previous owners of the Subject Land entered into an agreement under section 173 of the Act requiring compliance with Planning Permit (**First Agreement**).
- E Council and the Owner now agree that greater flexibility is required regarding the ending of the First Agreement. In order to achieve that outcome, the parties have agreed to enter into this Agreement.
- F The Owner intends to ask Council to end the First Agreement, with respect to the Subject Land, under section 178A of the Act.
- G The Parties enter into this Agreement to achieve and advance the objectives of planning in Victoria and the objectives of the Planning Scheme in respect of the Subject Land.

Agreed terms

1. Defined terms and interpretation

1.1 Defined terms

In this Agreement:

Act means the Planning and Environment Act 1987.

Agreement means this agreement and any agreement executed by the parties expressed to be supplemental to this Agreement.

Current Address for Service

for Council means the address shown on page 1 of this Agreement, or any other address listed on Council's website; and

for the Owner means the address shown on page 1 of this Agreement or any other address provided by the Owner to Council for any purpose or purposes relating to the Subject Land.

Current Email Address for Service

for Council means feedback@egipps.vic.gov.au, or any other principal office email address listed on Council's website; and

for the Owner means any email address provided by the Owner to Council for the express purpose of electronic communication regarding this Agreement or any other email address provided by the Owner to Council for any purpose or purposes relating to the Subject Land.

Current Number for Service

for Council means 03 5153 9576, or any other facsimile number listed on Council's website; and

for the Owner means any facsimile number provided by the Owner to Council for the express purpose of facsimile communication regarding this Agreement.

Endorsed Plan means the plan endorsed with the stamp of Council from time to time as the plan which forms part of the Planning Permit. A copy of the Endorsed Plan is available for inspection at Council offices during normal business hours upon giving the Council reasonable notice.

Lot means a lot on the Endorsed Plan.

Mortgagee means the person or persons registered or entitled from time to time to be registered by the Registrar of Titles as Mortgagee of the Subject Land or any part of it.

Notice means any notice, demand, consent, approval or communication under this agreement

Owner means the person or persons registered or entitled from time to time to be registered by the Registrar of Titles as proprietor or proprietors of an estate in fee simple of the Subject Land or any part of it and includes a Mortgagee-in-possession.

Party or Parties means the Owner and the Council.

Planning Permit means planning permit no. 583/2004/P/D granted by Council. A copy of the Planning Permit is available for inspection at Council offices during normal business hours upon giving Council reasonable notice.

Planning Scheme means the East Gippsland Planning Scheme.

Statement of Compliance means statement of compliance issued under section 21 of the *Subdivision Act 1988*.

Subject Land means the land situated at 69 Ashley Street, Paynesville being the land described as Lot 1 on PS802715L and contained in certificate of title volume 11867 folio 224 any reference to the Subject Land in this Agreement includes a reference to any lot created by the subdivision of the Subject Land or any part of it.

Tribunal means the Victorian Civil and Administrative Tribunal, and any tribunal or other person or body which supersedes it.

1.2 Interpretation

In this Agreement unless the context admits otherwise:

- (a) The singular includes the plural and vice versa.
- (b) A reference to a gender includes a reference to each other gender.
- (c) A reference to a person includes a reference to a firm, corporation or other corporate body and that person's successors in law.
- (d) If a Party consists of more than one person this Agreement binds them jointly and each of them severally.
- (e) A term used in this Agreement has its ordinary meaning unless that term is defined in this Agreement. If a term is not defined in this Agreement and it is defined in the Act it has the same meaning as defined in the Act.
- (f) A reference to an Act, Regulation or the Planning Scheme includes any Acts, Regulations or amendments amending, consolidating or replacing the Act, Regulation or Planning Scheme.
- (g) The introductory clauses to this Agreement form part of this Agreement.
- (h) The Owner's obligations take effect as separate and several covenants which are annexed to and run at law and equity with the Subject Land.
- (i) Any reference to a clause, page, condition, attachment or term is a reference to a clause, page, condition, attachment or term of this Agreement.

• •

2. Section 173 Agreement

2.1 Purpose

The Parties acknowledge and agree that the purposes of this Agreement are to:

- (a) give effect to the terms of the Planning Permit; and
- (b) achieve and advance the objectives of planning in Victoria and the objectives of the Planning Scheme in respect of the Subject Land.

2.3 Reasons for agreement

The Parties acknowledge and agree that this Agreement has been entered into for the following reasons:

- (a) Council would not have approved the Planning Permit to facilitate a residential subdivision of the Subject Land without the Owner entering into this Agreement; and
- (b) the Owner has elected to enter into this Agreement in order to take the benefit of the Planning Permit.

3. Commencement

This Agreement comes into force on the date of this Agreement.

4. Owner's Specific Obligations

4.1 Compliance with other permits

- (a) The Owner agrees that regardless of any rights conferred by the Planning Scheme, except with the prior written consent of Council, the Subject Land, or any part of it, must only be subdivided in a manner which depicts a lot layout and title boundaries which are:
 - (i) generally in accordance with the configuration and layout of the subdivision authorised by the Planning Permit and the various conditions included in that permit; and
 - (ii) wholly in accordance with the plans from time to time endorsed pursuant to condition 3 of the Planning Permit, which shows the required staging of the subdivision authorised by that permit.

4.2 Development must be to approval of Council

The Owner agrees that if the Planning Permit expires after this Agreement commences, the subdivision of the Subject Land must be to the satisfaction of Council.

5. Further Obligations of the Owner

5.1 Notice and Registration

The Owner further covenants and agrees that the Owner will bring this Agreement to the attention of all prospective purchasers, lessees, mortgagees, charges, transferees and assigns.

7

- (a) if delivered, on the next following business day;
- (b) if posted, on the expiration of 7 business days after the date of posting;
- (c) if sent by facsimile, on the next following business day unless the receiving party has requested retransmission before the end of that business day; or
- (d) if sent by email, the day on which it is sent.

8.3 No Waiver

Any time or other indulgence granted by Council to the Owner or any variation of the terms and conditions of this Agreement or any judgment or order obtained by Council against the Owner will not in any way amount to a waiver of any of the rights or remedies of Council in relation to the terms of this Agreement.

8.4 Severability

If a court, arbitrator, tribunal or other competent authority determines that a word, phrase, sentence, paragraph or clause of this Agreement is unenforceable, illegal or void then it must be severed and the other provisions of this Agreement will remain operative.

8.5 No fettering of Responsible Authority's powers

It is acknowledged and agreed that this Agreement does not fetter or restrict the power or discretion of Council to make any decision or impose any requirements or conditions in connection with the granting of any planning approval or certification of any plans of subdivision applicable to the Subject Land or relating to any use or development of the Subject Land.

8.6 Governing law

This Agreement is governed by and will be construed in accordance with the laws of the State of Victoria.

8.7 Ending

This Agreement ends:

- (a) if the Parties agree in writing to end the Agreement; or
- (b) if the subdivision of the Subject Land occurs in stages, upon the issue of the Statement of Compliance for that stage.

۰.,

5.2 Further actions

The Owner further covenants and agrees that:

- (a) the Owner will do all things necessary to give effect to this Agreement;
- (b) the Owner will consent to Council making application to the Registrar of Titles to make a recording of this Agreement in the Register on the Certificate of Title of the Subject Land in accordance with Section 181 of the Act and do all things necessary to enable Council to do so including signing any further agreement, acknowledgement or document or procuring the consent to this Agreement of any mortgagee or caveator to enable the recording to be made in the Register under that section.

5.3 Council's Costs to be Paid

The Owner further covenants and agrees that the Owner will immediately pay to Council, Council's reasonable costs and expenses (including legal expenses) of an incidental to the preparation, drafting, finalisation, engrossment, execution, registration and enforcement of this Agreement which are and until paid will remain a debt due to Council by the Owner.

6. Owner's Warranties

Without limiting the operation or effect which this Agreement has, the Owner warrants that apart from the Owner and any other person who has consented in writing to this Agreement, no other person has any interest, either legal or equitable, in the Subject Land which may be affected by this Agreement.

7. Successors in Title

Without limiting the operation or effect that this Agreement has, the Owner must ensure that, until such time as a memorandum of this Agreement is registered on the title to the Subject Land, successors in title shall be required to:

- (a) give effect to and do all acts and sign all documents which will require those successors to give effect to this Agreement; and
- (b) execute a deed agreeing to be bound by the terms of this Agreement.

8. General

8.1 Notices

A notice or other communication required or permitted to be served by a Party on another Party must be in writing and may be served:

- (a) personally on the other Party;
- (b) by leaving it at the Party's Current Address for Service;
- (c) by posting it by prepaid post addressed to that Party at the Party's Current Address for Service;
- (d) by facsimile to the Party's Current Number for Service; or
- (e) by email to the Party's Current Email Address for Service.
- 8.2 Service of Notice

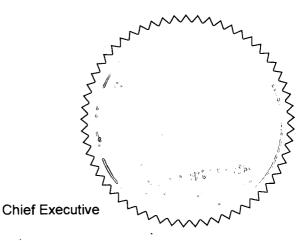
A notice or other communication is deemed served:

AQ868619Y

8

SIGNED, SEALED AND DELIVERED as an agreement under Division 2 of Part 9 of the Act and as a Deed between the Parties.

The Common Seal of the East Gippsland Shire Council was hereunto affixed on the 23% day of Febtuary, , in the presence of: 20%



Witness

Executed by Paynesville Park Pty Ltd ACN 608 385146 in accordance with s127(1) of the *Corporations Act 2001*:

Director / Print Name: MICHAEL SADCER.

Secretary

Print Name: THOM AS L. CAMP.



Electronic Instrument Statement

Mortgage Form version 1.5

Copyright State of Victoria. This publication is copyright. No part may be reproduced by any process except in accordance with the provisions of the Copyright Act 1968 (Cth) and for the purposes of Section 32 of the Sale of Land Act 1962 (Vic) or pursuant to a written agreement. The information is only valid at the time and in the form obtained from the LANDATA REGD TM System. None of the State of Victoria, LANDATA REGD TM System, Victorian Land Registry Services Pty. Ltd. ABN 86 627 986 396 as trustee for the Victorian Land Registry Services Trust ABN 83 206 746 897 accept responsibility for any subsequent release, publication or reproduction of the information.

Produced 26/08/2020 02:07:49 PM

Status Date and Time Lodged	Registered 30/10/2019 04:09:25 PM	Dealing Number	AS665402Q	
Lodger Details				
Lodger Code	20396F			
Name	MICHAEL BENJAMIN & ASSOCIATES			
Address				
Lodger Box				
Phone				
Email				
Reference	190383:Curry - Payne			
	MORTGAGE			

MORTGAGE

Jurisdiction

VICTORIA

Privacy Collection Statement

The information in this form is collected under statutory authority and used for the purpose of maintaining publicly searchable registers and indexes.

Estate and/or Interest being mortgaged

FEE SIMPLE

Land Title Reference

11867/225 11985/148

Mortgagor Name PAYNESVILLE PARK PTY LTD ACN 608385146 Mortgagee Name CURRY SECURITIES PTY LTD ACN 122368610 Address 117 Street Number Street Name CENTRE DANDENONG Street Type ROAD

Locality DINGLEY VILLAGE State VIC Postcode 3172





Electronic Instrument Statement

Mortgage Form version 1.5

The mortgagor mortgages the estate and/or interest in land specified in this mortgage to the mortgagee as security for the debt or liability described in the terms and conditions set out or referred to in this mortgage, and covenants with the mortgagee to comply with those terms and conditions.

Terms and Conditions of this Mortgage	
(a) Document Reference	

(b) Additional terms and conditions	NIL

AA1334

Mortgagee Execution

- 1. The Certifier holds a properly completed Client Authorisation for the Conveyancing Transaction including this Registry Instrument or Document.
- 2. The Certifier has taken reasonable steps to verify the identity of the mortgagee or his, her or its administrator or attorney.
- The Certifier, or the Certifier is reasonably satisfied that the mortgagee it represents,:
 (a) has taken reasonable steps to verify the identity of the mortgagor or his, her or its administrator or attorney; and
- (b) holds a mortgage granted by the mortgagor on the same terms as this Registry Instrument or Document.
- 4. The Certifier has taken reasonable steps to ensure that this Registry Instrument or Document is correct and compliant with relevant legislation and any Prescribed Requirement.
- 5. The Certifier has retained the evidence supporting this Registry Instrument or Document.

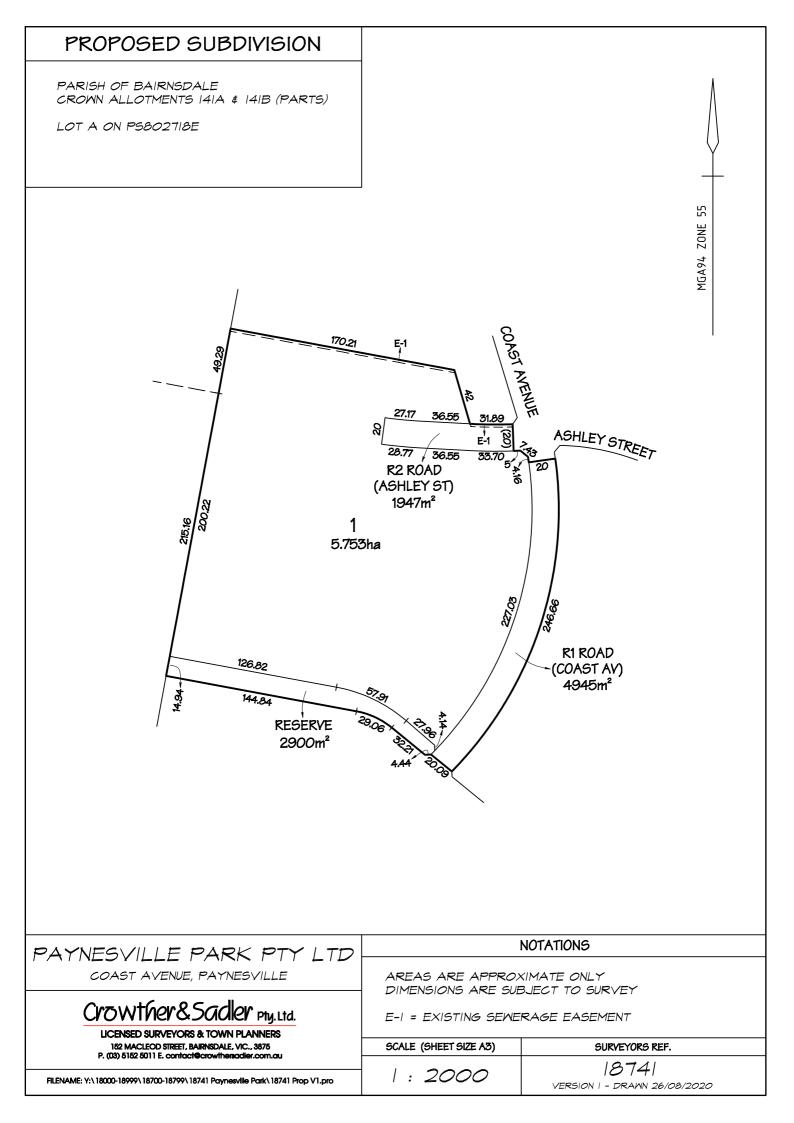
Executed on behalf of	CURRY SECURITIES PTY LTD
Signer Name	MARTA KAROLINA KOWALCZYK
Signer Organisation	MICHAEL BENJAMIN & ASSOCIATES
Signer Role	LAW PRACTICE
Execution Date	30 OCTOBER 2019

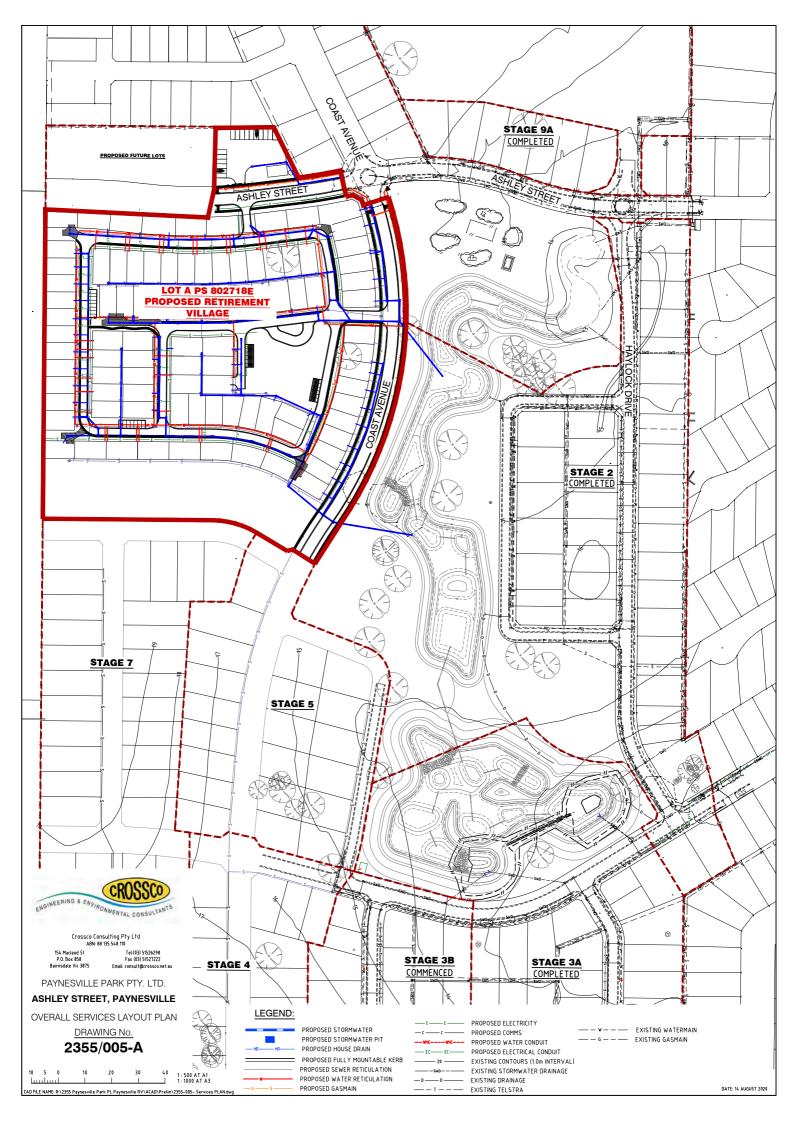
File Notes: NIL

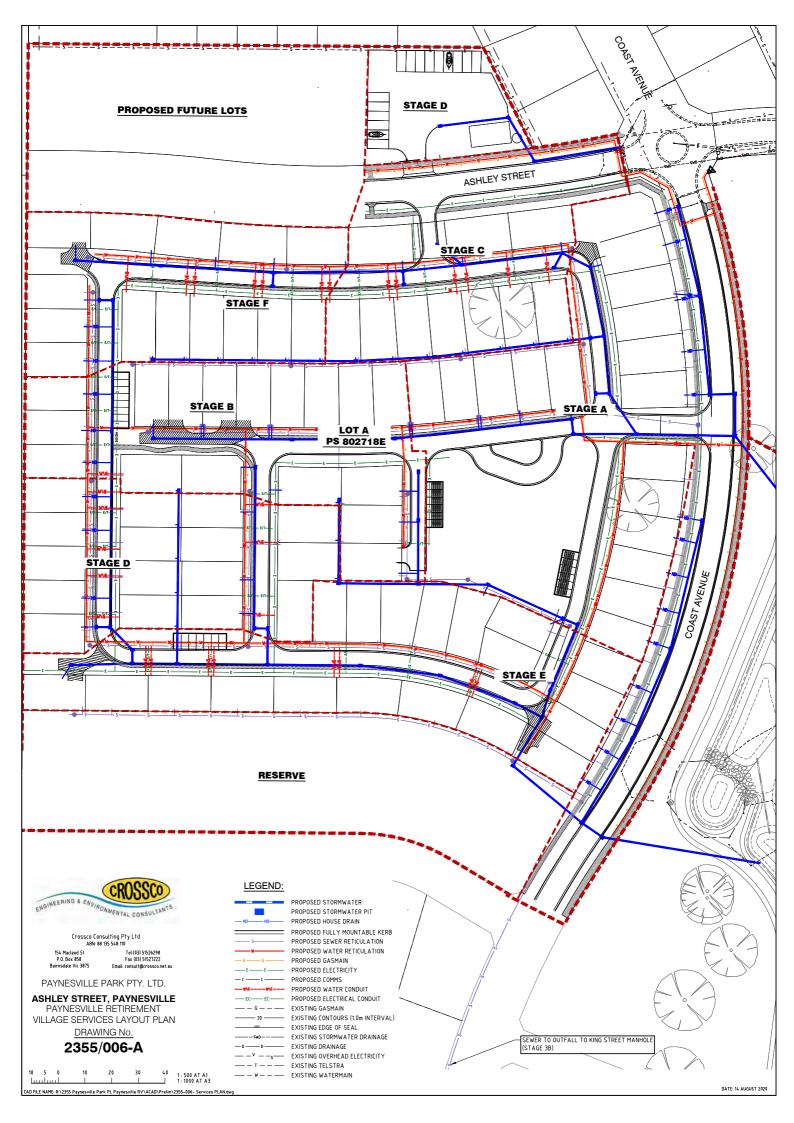
This is a representation of the digitally signed Electronic Instrument or Document certified by Land Use Victoria.

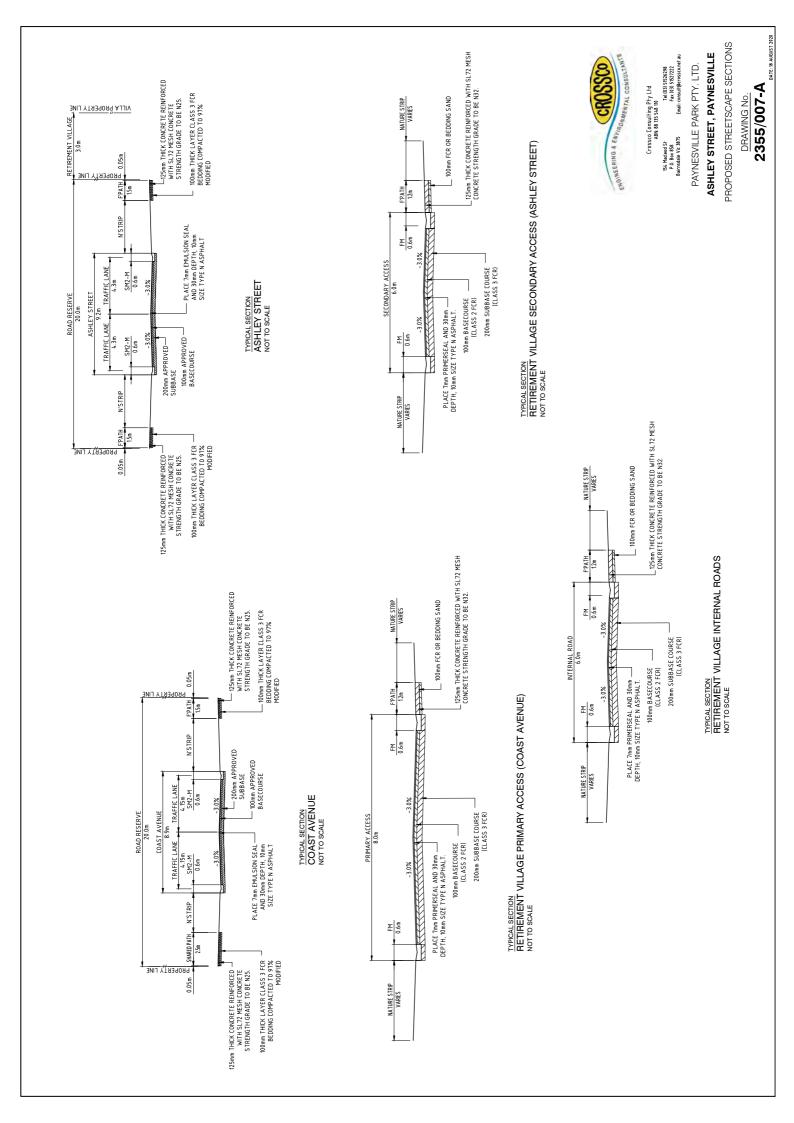
Statement End.

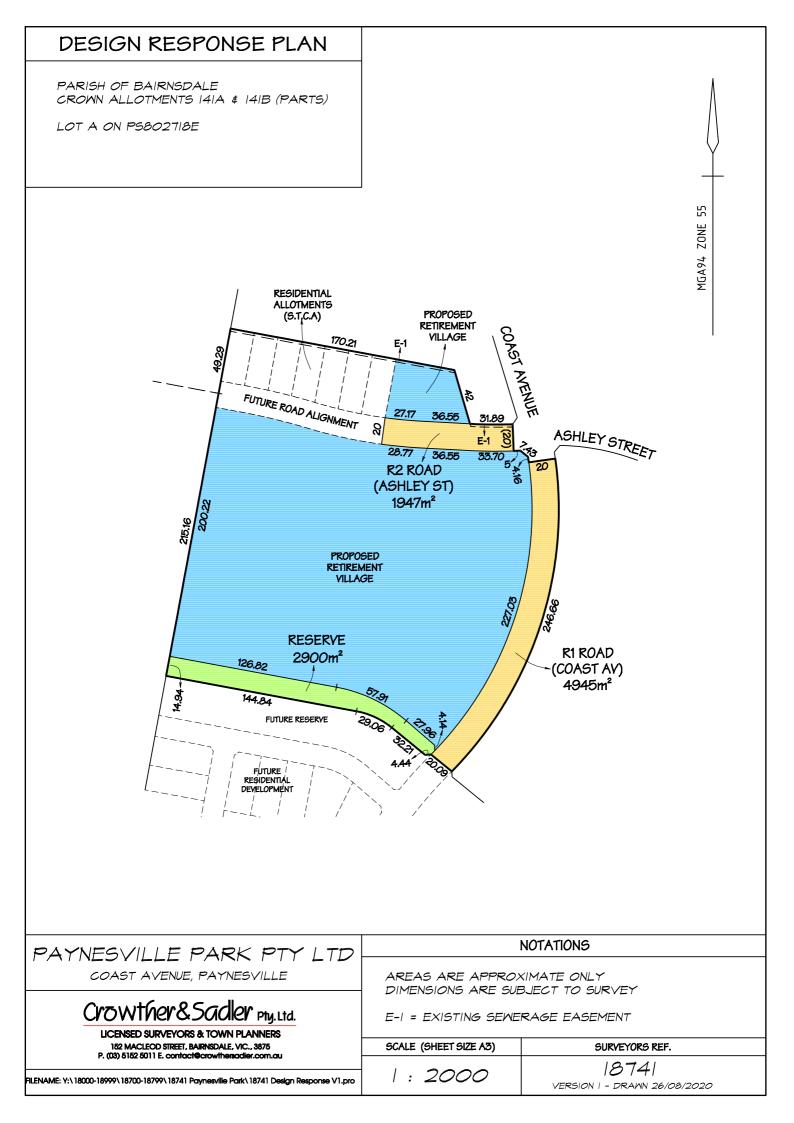








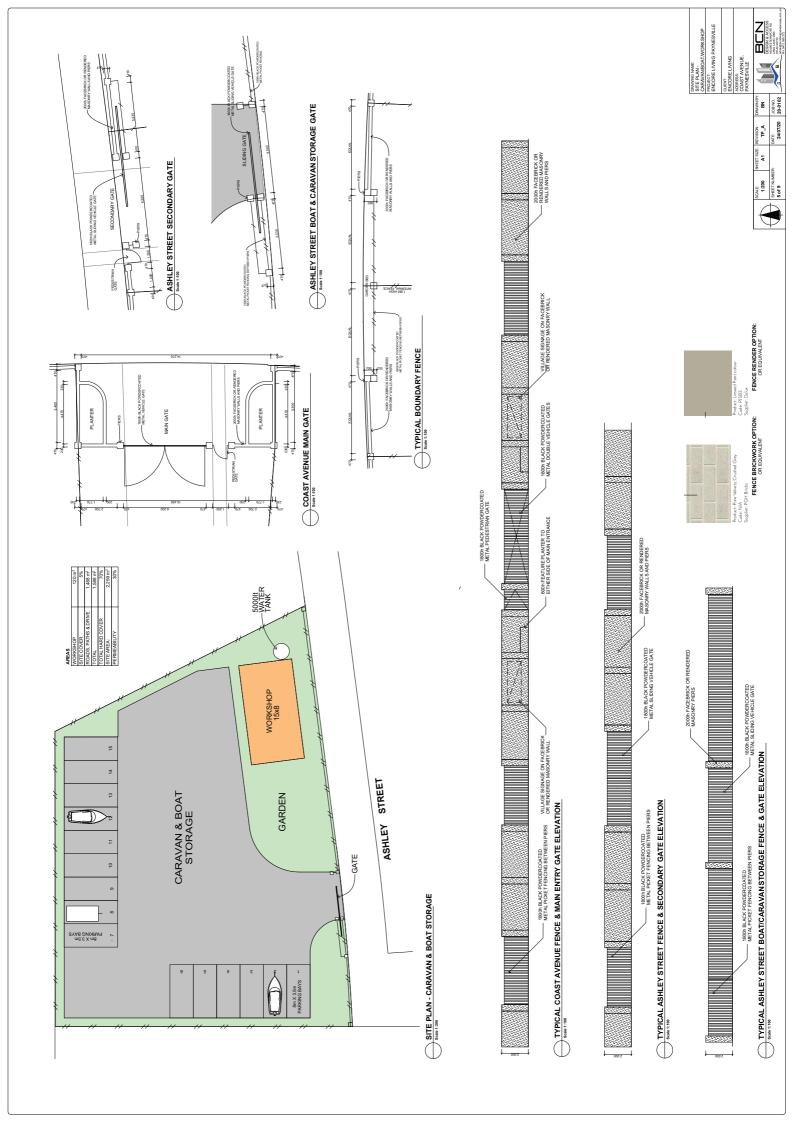


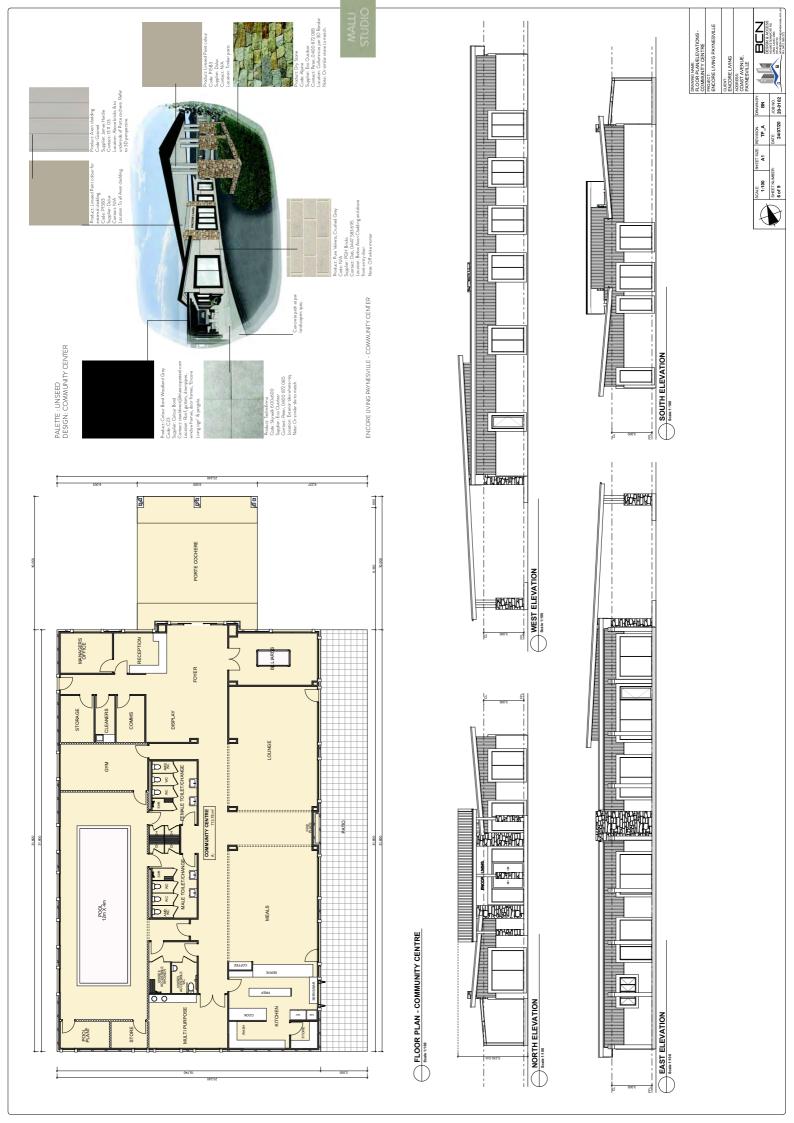


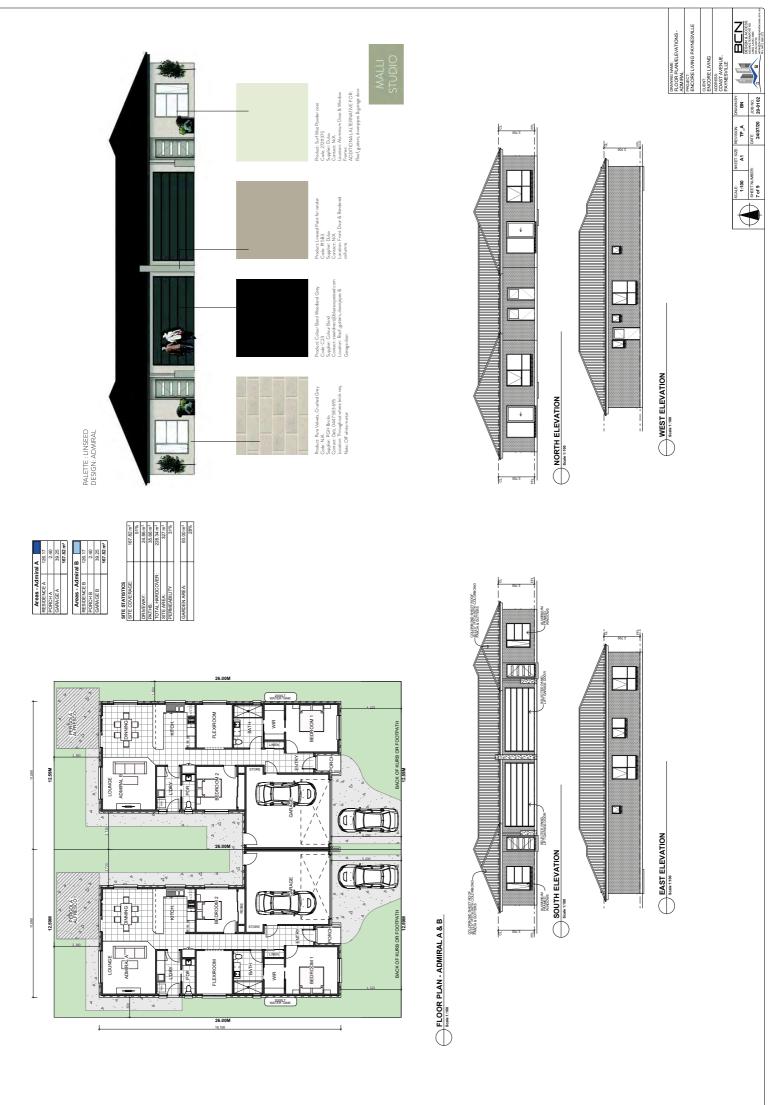


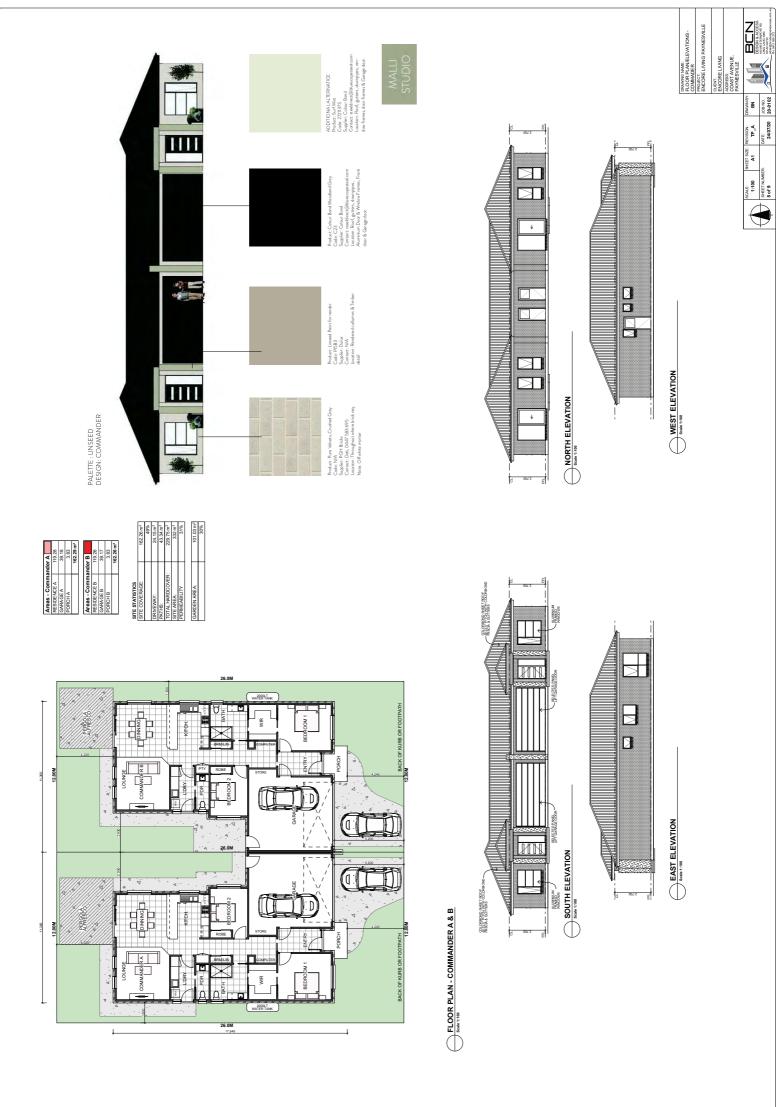




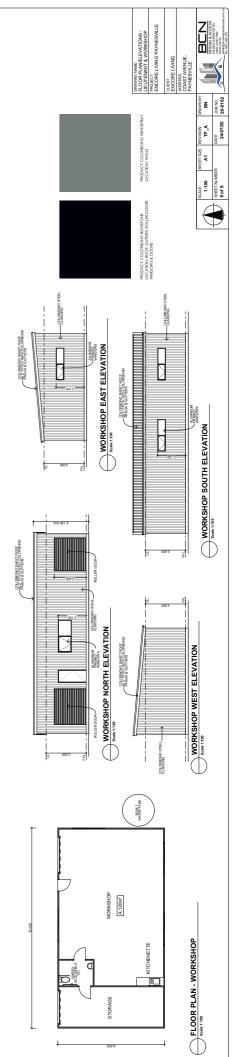


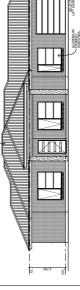












D

COLORBOND SHEET ROOF - 2225' FITCH WITH COLORBU

COLORBOND SHEET ROOF - 02255 PTCH WITH COLORBOND PASCIA & GUTTERS

MUNINUM MININGWIN

ţ

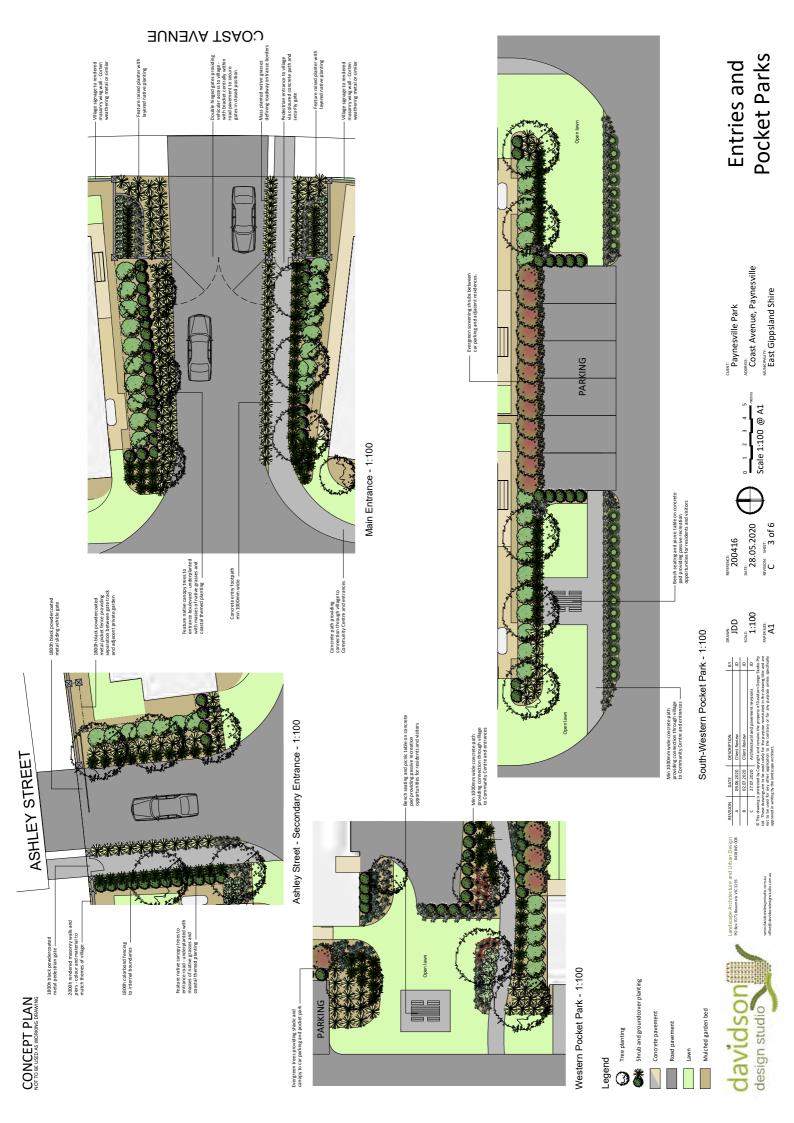
ļ

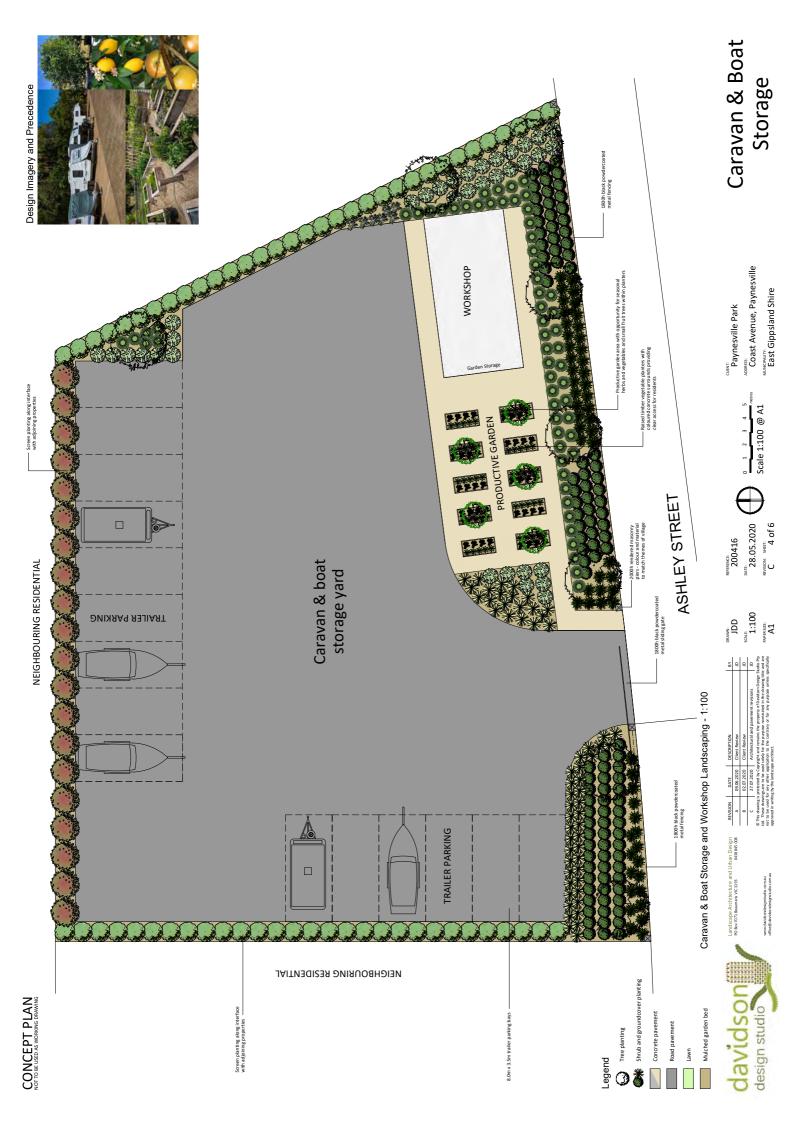
E,



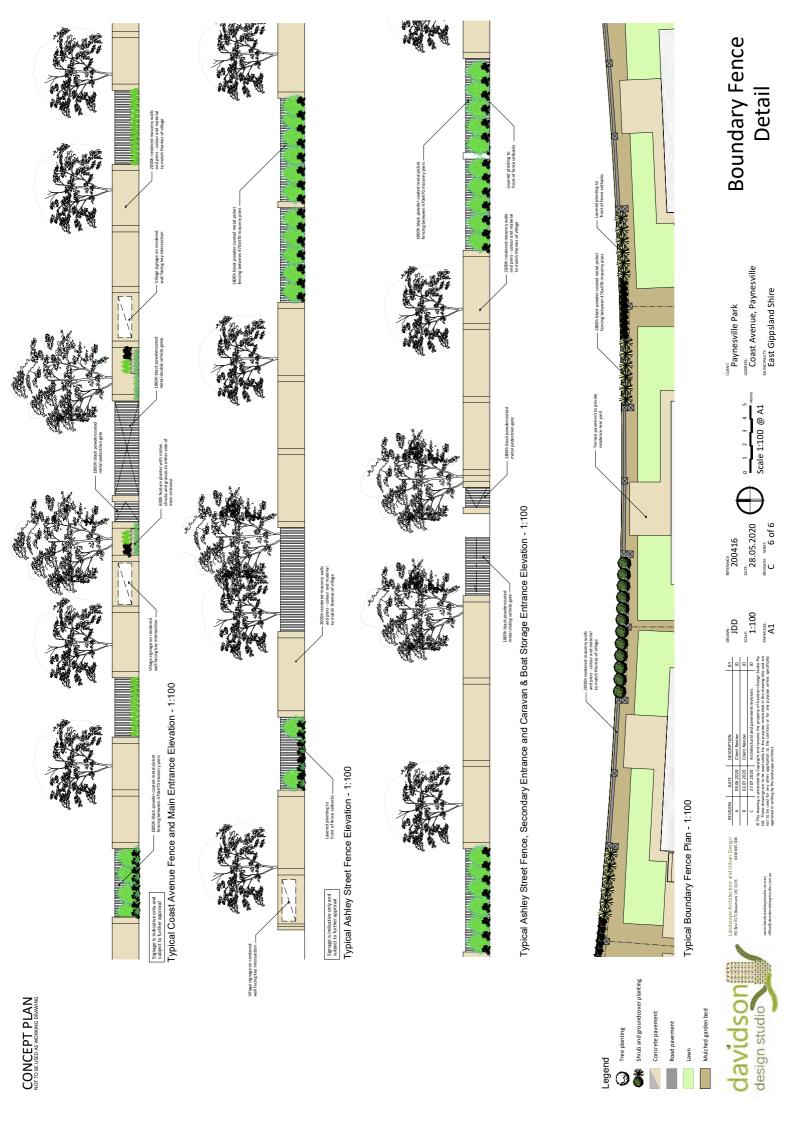














Paynesville Park Retirement Village

Stormwater Management Strategy

Town Planning Report



Prepared for: Paynesville Park Pty Ltd C/- Mr T Camp PO Box 8258 Carrum Downs Vic 3201

Prepared by: Crossco Consulting Pty Ltd PO Box 858 Bairnsdale Vic 3875

Version: Final 01



Document revision

Version	Date	Prepared by	Comments
Draft	04/08/2020	Crossco	Draft to Client & Town Planner for discussion
Final 01	20/08/2020	Crossco	Distributed to Client & Town Planner

This report is prepared by Crossco Consulting Pty Ltd Paynesville Park Pty Ltd to support a planning permit application. This report must not be reproduced in part or full, or provided to any other individual or entity without the prior consent of Crossco Consulting Pty Ltd.



Table of Contents	
1 Background	1
2 Site Description	1
2.1 Site Inspection	1
2.2 Location	
2.3 Site Features	2
3 Background Reports & Existing Permits	3
3.1 Surface Water Management Strategy and Functional Design of	
Wetland/Retarding System (Neil Craigie) 2008	
3.2 Current Planning Permit	
3.3 Other	
4 Existing Conditions	
4.1 Existing Drainage Infrastructure	
4.2 Flooding	
5 Proposed Stormwater Management Strategy	
5.1 "Internal" Retirement Village	
5.2 "External" Public Infrastructure	
5.3 Concept Summary	
6 Staging of works	
6.1 Retirement Village	
6.2 Wetland	
7 Clause 53.18 Assessment	
8 Construction Phase	
9 Recommendations	
10 Report Limitations	1/

Appendix 1 – Neil Craigie Report & Functional Design 2008
Appendix 2 – Crossco Concept Stormwater Layout Drawing
Appendix 3 – PS 729135M



1 Background

Crossco Consulting Pty Ltd (Crossco) has been engaged by Paynesville Park Pty Ltd to prepare a Stormwater Management Strategy to accompany a planning permit application for a proposed 93 villa retirement village and associated subdivision and infrastructure.

This report is limited to matters relevant to management of stormwater.

This Stormwater Management Strategy (SMS) is based on progressing the stormwater strategy and associated functional design (Neil Craigie 2008) previously adopted by Council.

2 Site Description

2.1 Site Inspection

2.2 Location

The subject site address is 91 Coast Avenue, Paynesville, being Lot A on PS 802718. The site area is 6.732ha.



Figure 1: Site Location



2.3 Site Features

Slope

The site generally slopes from the north-west toward the south-east at 2.3% slope (1V:43H or 1.3 degrees).

Elevation

Maximum elevation of the site is approximately 23m AHD to a minimum elevation of approximately 16m AHD.

Infrastructure

There is no infrastructure onsite, with the exception of a west boundary fence (farm fencing).

Erosion

There is no visible scouring or erosion. The existing vegetation provides good ground cover and soil conservation.

Drainage lines

There is no designated waterway or defined drainage line within the subject site. There is an existing small farm dam (approximately 25m diameter) which is located consistent with the lowest point of the site.



Figure 2: Site Features



3 Background Reports & Existing Permits

There are a number of key reports, planning permits and reference documents that inform this stormwater management strategy.

3.1 Surface Water Management Strategy and Functional Design of Wetland/Retarding System (Neil Craigie) 2008

A "surface water strategy" and "functional design of wetland/retarding system" (Craigie report / Craigie wetland) was completed by Neil Craigie dated 2008 (report and functional design drawing at Appendix 1) for Watsons Pty Ltd.

Consistent with the first stage of "The Coast" and previous stages of Paynesville Park, Crossco understands that Council requires the ongoing implementation of the recommendations of the Craigie report, and progressive construction of the Craigie wetland.

The subject land is within the boundary of the "Craigie report" study area as shown in Figure 3, and the "Craigie wetland" allows for detention and treatment of post development stormwater generated at the subject site.

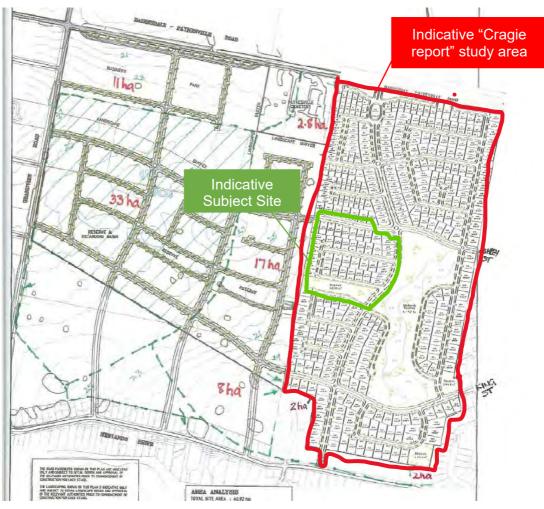


Figure 3: Craigie Report Study Area¹

¹ Source: Part Figure 2, "Craigie Report" 2008



The stormwater generated at the proposed Retirement Village will outfall to the "Craigie wetland" at two locations (refer to drawing at Appendix 2):

- adjacent to access road at Coast Avenue entry
- adjacent to south- east corner of the subject site through the proposed Reserve to the south of the Retirement Village.

The Craigie wetland functional design is based on a number of key assumptions that require review due to the increased density of proposed development, additional impervious surfaces and inclusion of onsite detention as summarised in Table 1.

Assumption	Pre-Development	Craigie 2008	Proposed Retirement Village
Development	Open grassland	Residential (Lot area	Residential retirement
Standard		600m2-1000m2)	village (Lot area
			<300m2)
Runoff Coefficient ⁽¹⁾	0.35	0.70	0.80
(adopted from IDM)			
Peak Flow ⁽²⁾	0.336 m3/sec	403 m3/sec	461 m3/sec
Detention ⁽³⁾	0 m3	202 m3	260 m3
(Maximum storage)			

Table 1: Concept Development Flow & Storage Summary

Notes:

- 1. From IDM Table 10.
- 2. Based on Rationale Method calculation. 20% AEP (approx. 5 Year ARI) and 10 minute Time of Concentration.
- 3. Based on 20% AEP (approx. 5 Year ARI) and 10 minute Time of Concentration.

The results summarised in

Table 1 demonstrate:

- an increased detention requirement of 58 m3 (or 58,000 litres) being the difference between the detention of 202 m3 (Neil Craigie assumptions) and 260 m3 (subject proposal).
- the proponent proposes to construct two subsurface detention tanks (total of 52 m3 storage), which will result in a difference of 6m3 (58m3 52m3) in required and provided site detention.

Notwithstanding the proposed 52m3 onsite storage, the "Craigie wetland" volume at normal top water level (NTWL) is 7,500 m3 (upper wetland cell) PLUS 5,800m2 (lower wetland cell), totalling 13,300m3. If an additional 58m3 detention was required in the wetland, this would result in a less than 0.5% increase in storage volume which is immaterial.



The existing Reserve and "Neil Craigie Wetland" has adequate area for an increase in wetland volume if required. The detailed design phase will confirm wetland capacity and surface area requirements based on current development densities, rainfall data, onsite detention, and design standards.

3.2 Current Planning Permit

East Gippsland Planning Permit 283/2004/P as amended includes the following requirement at Condition 6 (Staging):

The proposed wetland and surrounding public open space including landscaping associated with the wetland and public open space, located within Lot 2 PS 729135 must be completed within 12 months of the completion of the earth works associated with the construction of Stage 4.

A copy of the plan of subdivision referred to is included at Appendix 3.

The wetland referred to in the planning permit is subject to final design and approval by Council as it will become a Council asset and form part of the Municipal stormwater management infrastructure. Upon construction, the wetland can provide the required stormwater outfall, detention and treatment for the proposed Retirement Village.

Construction of the majority of the *Neil Craigie* wetland is a condition of the current planning permit 583/2004/P/D as amended.

Completion of the *Neil Craigie* wetland is not required to provide detention and treatment for the proposed Retirement Village. It is noted that timing and responsibility for connection to the existing wetland shown in Figure 4: Part "Upper cell" wetland is unclear. The current planning permit 583/2004/P/D refers specifically to the wetland on Lot 2 on PS 729135 (refer to Appendix 3) which is a separate parcel of land to the south of the parcel ("Res 4" in Figure 5) where the "Part upper cell" shown in Figure 4 is located. The proposed Retirement Village drainage outfall does not propose any construction on the "Res 4" parcel.

3.3 Other

East Gippsland Shire have adopted the Infrastructure Design Manual (Version 5.30) and generally require design and construction of civil infrastructure to be consistent with the IDM.

4 Existing Conditions

This assessment of existing conditions considers matters specifically relevant to drainage and the provision of stormwater management for the proposed Retirement Village.

4.1 Existing Drainage Infrastructure

There is no existing drainage infrastructure at the site, with the exception of the farm dam shown in Figure 2.



There is existing urban drainage infrastructure in proximity to the site as illustrated in the drawings at Appendix 2 being:

- roads and subsurface drains in Coast Avenue (to the north) and Ashley Street (to the east).
- constructed wetland (North wetland) outfalling to Ashley Street to the east.



Figure 4: Part "Upper cell" wetland

The "Part Upper cell wetland" is constructed in "Res4" as shown in **Error! Reference source not found.** The design of the wetland is understood to be based on the functional design by Neil Craigie (refer to Section 3.1) which included "upper cell" and "lower cell" wetlands outfalling to Ashley Street and King Street. The "Part upper cell wetland" constructed is part of the proposed "upper cell" wetland proposed by Neil Craigie's functional design (included at Appendix 1). "Res 4" was created by PS 604023 for the purposes of Drainage and Recreation and vested with East Gippsland Shire.

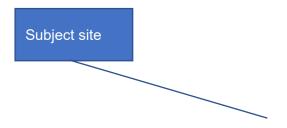
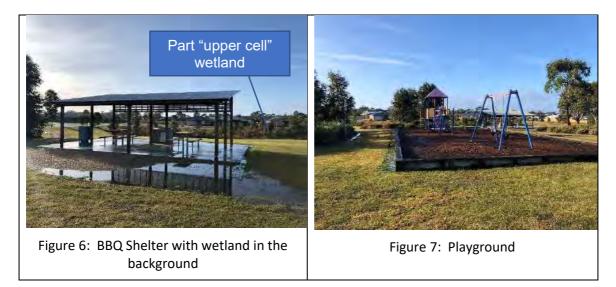






Figure 5: Drainage Reserve

In addition to the wetland "Res 4" includes a BBQ shelter, playground and path.



Drainage infrastructure has been constructed as part of the orderly development of Stage 9, Stage 2, Stage 3A and Stage 3B (commenced) in accordance with Planning Permit 583-2004/P/D as amended, to the south east of the site including:

- roads and subsurface drainage at King Street, Bedggood Grove, Haylock Drive and Bishop View (refer to Appendix 2).
- temporary swale to provide drainage outfall (storage and overflow outfall to King Street) from Bishop View (refer to Figure 8). The design of this temporary outfall swale is consistent with the Craigie 2008 functional design.



- temporary sediment / detention basins to the north of Stages 3A and 3B. The design of these temporary basins is consistent with the Craigie 2008 functional design and represent the progressive development of the Craigie 2008 design.



Figure 8: Bishops View temporary swale



Figure 9: Temporary Basins

4.2 Flooding

As noted in Section 2.3 the site elevation varies from approximately 23m AHD in the north-west corner to 16m AHD at the south-east corner of the site. The "Neil Craigie 2008 Functional Design" is based on the following water levels:

Table 2	: Wetland	water	levels
		mater	101010

	NTWL	100 year ARI
Upper cell	12.5m AHD	14m AHD



Lower cell	11m AHD	12.5m AHD

The proposed "upper cell" is immediately to the east of the subject site, and the functional design levels at Table 2 provides confidence that at the lowest elevation the subject has been calculated to be 2m above the 100 year ARI flood level.

5 Proposed Stormwater Management Strategy

A concept stormwater management layout drawing is included at Appendix 2.

5.1 "Internal" Retirement Village

The proposed stormwater collection system comprises a standard pit/pipe design incorporated into the accessway design.

Onsite detention is proposed adjacent to the Community Centre, that will provide for use of stormwater onsite for irrigation.

The "internal" retirement village infrastructure is proposed to remain a privately owned asset and is not required to be designed or constructed to IDM standards. Stormwater will be discharged off-site to an existing Council Reserve compliant with the IDM to Council's satisfaction including drainage of accessways and outfalls to municipal drainage infrastructure via proposed road reserves and the proposed Reserve.

5.2 "External" Public Infrastructure

The design and construction of the stormwater collection system external to the Retirement Village site system will be based on IDM standards.

All stormwater from proposed roads and property drains will be collected and outfall to the "Craigie wetland" at the two points shown on the drawing at Appendix 2.

5.3 Concept Summary

In addition to the assumptions included in Table 1, Table 3 summarises areas and detention assumed. These figures are conceptual and subject to final subdivisional plans and detailed design.

Assumption	Proposed Retirement Village
Onsite detention	52,000 litre subsurface tanks
Proposal areas (approximate)	
Total site area	6.732 ha
(Lot A on PS 802718E)	
Reserve	0.9103 ha
Development site	
Caravan Storage	0.2259 ha
Residential	4.5982 ha

Table 3: Concept computation area summary



Ashely Street future Residential (not part of subject planning permit	0.5319 ha
application)	
Road Reserve (Ashley Street & Coast	0.4660 ha
Avenue extensions)	

In addition to the 52,000 litre subsurface detention tanks the following tanks will be incorporated into building construction at the site:

- 2,000 litres tank at villas (total 184,000 litres). These tanks are proposed to be plumbed in to provide for reuse in toilet flushing and will be fitted with a garden tap to provide for outdoor watering of gardens and lawns.
- 5,000 litre tank at caravan / trailer storage, which will be used for watering of landscaped areas.

These additional storage tanks have not been included in the concept detention calculations, resulting in a conservative assessment of available detention capacity and off-site discharge. The inclusion of these additional tanks could result in:

- Deletion of part of the subsurface tank storage
- Additional on-site detention
- Provide additional reuse at the site.

6 Staging of works

6.1 Retirement Village

Refer to Crossco Drawing 2255/005-A at Appendix 2 which show proposed staging of the development of the Retirement Village.

Stage A is proposed to include:

- construction of drainage associated with Coast Avenue to the east of the subject site
- construction of the outfall drainage from the site to the Reserve wetland
- installation of sub-surface tanks associated with Community Centre and some road drainage
- progressive installation of 2000 litre tanks at villas
- construction of internal accessways required to access villas in each stage

6.2 Wetland

External to subject site: The "Craigie wetland" is required by condition 6(a) of Planning Permit 583/2004/P/D and is proposed to be constructed prior to use of the site.

7 Clause 53.18 Assessment

The requirements of Clause 53.18 are noted in this section along with:

- comments regarding relevance of Clause requirements to the subject proposal.
- recommendations to ensure ongoing compliance post-construction.
- a table summarising the Clause decision guidelines and proposed compliance measures.



53.18 STORMWATER MANAGEMENT IN URBAN DEVELOPMENT vc154 26/10/2018 Purpose

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

53.18-1 Application VC154 26/10/2018

This clause applies to an application under a provision of a zone to subdivide land, construct a building, or construct or carry out works, other than the following applications:

- An application under a provision of the Farming Zone, Green Wedge Zone, Green Wedge A Zone, Low Density Residential Zone, Public Conservation and Resource Zone, Road Zone, Rural Activity Zone, Rural Conservation Zone, Rural Living Zone, Urban Floodway Zone or Urban Growth Zone.
- A VicSmart application.
- An application to subdivide land in a residential zone for residential purposes.
- An application to construct or extend a dwelling, fence or residential building in a residential zone.
- An application for development associated with the use of land for agriculture or earth and energy resources industry.
- An application to construct a building or construct or carry out works associated with one dwelling on a lot.
- An application to alter, extend or make structural changes to an existing building provided the gross floor area of the building is not increased by more than 50 square metres.
- An application to construct a building with a gross floor area not exceeding 50 square metres.
- An application to construct or carry out works with an area not exceeding 50 square metres.
- An application to subdivide land into lots each containing an existing building or car parking space.
- An application to construct a building or to construct or carry out works on a lot if all of the following requirements are met:
 - The lot was created in accordance with a permit granted under this planning scheme.
 - The application for that permit was assessed against the requirements of this clause.
- An application for land affected by a development plan or incorporated plan that was approved or incorporated in this planning scheme before the approval date of Amendment VC154.
- An application lodged before the approval date of Amendment VC154.
- An application for an amendment of a permit under section 72 of the Act, if the original permit application was lodged before the approval date of Amendment VC154.

The proposal is required to comply with Clause 53.18-1 as proposed works will exceed 50 square metres.



53.18-2 Operation VC154 26/10/2018

The provisions of this clause contain:

- Objectives. An objective describes the desired outcome to be achieved in the completed development.
- Standards. A standard contains the requirements to meet the objective.

A standard should normally be met. However, if the responsible authority is satisfied that an application for an alternative solution meets the objective, the alternative solution may be considered.

The objectives and standards of Clause 53.18 relevant to the proposal are considered to have been met by the proposed stormwater strategy shown in the attached Crossco drawing (refer to Appendix 2).

53.18-3 Requirements VC154 26/10/2018

An application to subdivide land:

- Must meet all of the objectives of Clauses 53.18-4 and 53.18-6.
- Should meet all of the standards of Clauses 53.18-4 and 53.18-6.

An application to construct a building or construct or carry out works:

- Must meet all of the objectives of Clauses 53.18-5 and 53.18-6.
- Should meet all of the standards of Clauses 53.18-5 and 53.18-6.

An application must be accompanied by details of the proposed stormwater management system, including drainage works and retention, detention and discharges of stormwater to the drainage system.

The subject proposal is required to meet the requirements of Clauses 53.18-5 and 53.18-6 as the proposal is an application to construct or carry our works. Subdivision is limited to the creation of small areas of road reserve and a Reserve for drainage and recreation.

53.18-4 Stormwater management objectives for subdivision VC15426/10/2018

To minimise damage to properties and inconvenience to the public from stormwater. To ensure that the street operates adequately during major storm events and provides for public safety.

To minimise increases in stormwater and protect the environmental values and physical characteristics of receiving waters from degradation by stormwater.

To encourage stormwater management that maximises the retention and reuse of stormwater. To encourage stormwater management that contributes to cooling, local habitat improvements and provision of attractive and enjoyable spaces.

Standard W1

The stormwater management system should be:

• Designed and managed in accordance with the requirements and to the satisfaction of the relevant drainage authority.



- Designed and managed in accordance with the requirements and to the satisfaction of the water authority where reuse of stormwater is proposed.
- Designed to meet the current best practice performance objectives for stormwater quality as contained in the Urban Stormwater Best Practice Environmental Management Guidelines (Victorian Stormwater Committee, 1999).
- Designed to ensure that flows downstream of the subdivision site are restricted to predevelopment levels unless increased flows are approved by the relevant drainage authority and there are no detrimental downstream impacts.
- Designed to contribute to cooling, improving local habitat and providing attractive and enjoyable spaces.

The stormwater management system should be integrated with the overall development plan including the street and public open space networks and landscape design.

For all storm events up to and including the 20% Average Exceedence Probability (AEP) standard:

- Stormwater flows should be contained within the drainage system to the requirements of the relevant authority.
- Ponding on roads should not occur for longer than 1 hour after the cessation of rainfall.

For storm events greater than 20% AEP and up to and including 1% AEP standard:

- Provision must be made for the safe and effective passage of stormwater flows.
- All new lots should be free from inundation or to a lesser standard of flood protection where agreed by the relevant floodplain management authority.
- Ensure that streets, footpaths and cycle paths that are subject to flooding meet the safety criteria and Vave < 0.35 m2/s (where, da = average depth in metres and Vave = average velocity in metres per second).

The design of the local drainage network should:

- Ensure stormwater is retarded to a standard required by the responsible drainage authority.
- Ensure every lot is provided with drainage to a standard acceptable to the relevant drainage authority. Wherever possible, stormwater should be directed to the front of the lot and discharged into the street drainage system or legal point of discharge.
- Ensure that inlet and outlet structures take into account the effects of obstructions and debris build up. Any surcharge drainage pit should discharge into an overland flow in a safe and predetermined manner.
- Include water sensitive urban design features to manage stormwater in streets and public open space. Where such features are provided, an application must describe maintenance responsibilities, requirements and costs.

Any flood mitigation works must be designed and constructed in accordance with the requirements of the relevant floodplain management authority.

Compliance with this Clause (53.18-4) is required as subdivision is proposed to create road reserve and Reserve for drainage and recreation.

The proposed drainage strategy is consistent with the *Neil Craigie report* and proposes detailed design and construction in accordance with IDM requirements (Appendix 2).

Pre & Post Development flow:



The proposed stormwater strategy relies on the *Neil Craigie report* and further that Council require the ongoing implementation of the *Neil Craigie wetland*.

Therefore pre and post development flows have not been assessed or considered further than the consideration included in Section 3.1 which provides a summary of the impact of updated assumptions on the *Neil Craigie wetland* functional design.

53.18-5 Stormwater management objectives for buildings and works VC154 26/10/2018

- To encourage stormwater management that maximises the retention and reuse of stormwater.
- To encourage development that reduces the impact of stormwater on the drainage system and filters sediment and waste from stormwater prior to discharge from the site.
- To encourage stormwater management that contributes to cooling, local habitat improvements and provision of attractive and enjoyable spaces.
- To ensure that industrial and commercial chemical pollutants and other toxicants do not enter the stormwater system.



Standard W2

The stormwater management system should be designed to:

- Meet the current best practice performance objectives for stormwater quality as contained in the Urban Stormwater Best Practice Environmental Management Guidelines (Victorian Stormwater Committee, 1999).
- Minimise the impact of chemical pollutants and other toxicants including by, but not limited to, bunding and covering or roofing of storage, loading and work areas.
- Contribute to cooling, improving local habitat and providing attractive and enjoyable spaces.

This Clause (53.18-5) will be complied with by incorporation of on-site detention and reuse of stormwater for irrigation and flushing of toilets to reduce off-site discharge. While no on-site storage of chemicals or other toxicants is proposed or foreseen in this application, if this occurs the EPA publication 1698 Liquid Storage and handling guidelines will be complied with.

53.18-6 Site management objectives VC154 26/10/2018

To protect drainage infrastructure and receiving waters from sedimentation and contamination. To protect the site and surrounding area from environmental degradation prior to and during construction of subdivision works.

Standard W3

An application should describe how the site will be managed prior to and during the construction period and may set out requirements for managing:

- Erosion and sediment.
- Stormwater.
- Litter, concrete and other construction wastes.
- Chemical contamination.

A Construction Environmental Management Plan will be prepared and complied with during construction (refer to Section 8).



53.18-7 Decision guidelines VC154 26/10/2018

Before deciding on an application, in addition to the decision guidelines in Clause 65, the responsible authority must consider, as appropriate:

Guideline	Comment
Any relevant water and stormwater management objective, policy or statement set out in this planning scheme.	The proposal is consistent with ensuring that stormwater in urban development, including retention and reuse, is managed to mitigate the impacts of stormwater on the environment, property and public safety, and to provide cooling, local habitat and amenity benefits.
The capacity of the site to incorporate stormwater retention and reuse and other water sensitive urban design features.	Retention and reuse has been incorporated into the design.
Whether the development has utilised alternative water sources and/or incorporated water sensitive urban design.	Retention and reuse has been incorporated into the design.
Whether stormwater discharge from the site will adversely affect water quality entering the drainage system.	Stormwater discharge from the site is required to implement the <i>Neil Craigie wetland</i> . Subject to detailed design of the wetland there will be no adverse impact on the existing drainage infrastructure.
The capacity of the drainage network to accommodate additional stormwater.	The Neil Craigie report and associated wetland consider the capacity of the King Street and Ashley Street drainage infrastructure. Subject to the Neil Craigie wetland detailed design including a review of the assumptions made in the Neil Craigie report, the wetland can be designed to ensure the capacity of the existing pipes is not exceeded.
Whether the stormwater treatment areas can be effectively maintained.	Subject to Council requiring the detailed design of the <i>Neil</i> <i>Craigie wetland</i> to be in accordance with the IDM and Melbourne Water guidelines, the areas will be able to be effectively maintained.
Whether the owner has entered into an agreement to contribute to offsite stormwater management in lieu of providing an on-site stormwater management system.	Planning Permit 583/2004/P/D requires the construction of off-site stormwater treatment in the form of part of the <i>Neil</i> <i>Craigie wetland</i> . This planning permit is being acted on and the subject land is in the same ownership as the balance of the Paynesville Park development. The wetland is required to provide stormwater outfall for the subject proposal. The proponent proposes to construct the wetland as required by the planning permit condition and advises that this will be
	completed prior to occupancy of the proposed retirement village. The proponent has indicated preparedness to enter into a S173 legal agreement with Council to provide the RA with certainty regarding the proposed timing of the wetland construction.

Table 4: Decision Guidelines Summary



8 Construction Phase

Risk to surface water during the construction period will include:

- Litter
- Mobilised sediment from disturbed ground
- Fuels and oil
- Cement, emulsions and primers, water from cleaning (eg. paints, concrete, tiling) A Construction Environmental Management Plan (CEMP) should consider mitigation of risks created during both civil and building construction on-site and for any required off-site infrastructure. Both Civil and Building construction activities require attention during construction to minimise the risk of stormwater contamination.

The CEMP must be consistent with:

- EPA publication 275, Construction Techniques for Sediment Pollution Control
- EPA publication 480, Environmental guidelines for major construction sites
- Melbourne Water publication, Keeping our stormwater clean a builder's guide
- EPA publication 1698, Liquid storage and handling guidelines
- 960: Doing it right on subdivisions: Temporary environmental protection measures for subdivision construction sites

9 Recommendations

- Stormwater management for the proposed Retirement Village can be designed and constructed consistent with the requirements of the IDM, East Gippsland planning scheme and the *Neil Craigie 2008* report.
- Detailed design of the Neil Craigie 2008 functional design must incorporate current and proposed development density as well as on-site detention.
- The Retirement Village proposal is consistent with the orderly development of Paynesville Park and required construction of the wetland (Planning Permit 583/2004/P/D condition 6(a).

10 Report Limitations

This section is not intended to reduce the responsibility of *Crossco Consulting Pty Ltd*, however this report is based on visual observations and information including scope provided by our Client.

M Supplitt 20/08/2020





Appendix 1 – Neil Craigie Report & Functional Design 2008



ACN 074 582 282 ABN 29 074 582 282

Waterway Management Consultants

LAKE PENINSULA ESTATE

BAIRNSDALE ROAD, PAYNESVILLE

SURFACE WATER MANAGEMENT STRATEGY

AND

FUNCTIONAL DESIGN OF WETLAND/RETARDING SYSTEM

(FINAL REPORT)

For: Watsons Pty Ltd

Neil M Craigie and Pat Condina

22 April 2008

Director Neil McKinnon Craigie BE(Civil), MEngSci, MIEAust, CPEng

TABLE OF CONTENTS

1.	INTRODUCTION	1
2.	KEY INFORMATION	1
3.	EXISTING CONDITIONS AND DRAINAGE CONTROLS	2
4.	THE SURFACE WATER MANAGEMENT STRATEGY	4
4.1	General Principles	4
4.2	Site Values, Constraints and Opportunities	5
4.3	Strategy Objectives	6
4.4	WSUD Options	7
4.5	Strategy Components	10
4.6	Quantifying Water Quality and Quantity Impact Mitigation Needs	14
4.7	The Recommended Strategy	16
5.	WETLAND/RETARDING STORAGE FUNCTIONAL DESIGN	17
5.1	Layout and Design	17
5.2	Flood Modelling	19
5.3	Water Quality Modelling	20
6.	DESIGN AND FUTURE MANAGEMENT OF WETLANDS AND PONDS	21
7.	POTENTIAL WATER QUALITY PROBLEMS AND RESPONSES	24
8.	WETLAND MAINTENANCE AND MONITORING	25
9.	CONSTRUCTION STAGE MANAGEMENT	26
10.	SUMMARY AND CONCLUSIONS	27
11.	ABBREVIATIONS AND DEFINITIONS	28
12.	REFERENCES	28
APP	ENDIX 1 AQUATIC PLANTINGS	42
		i

1. INTRODUCTION

This submission has been prepared in response to a request by Watsons P/L on behalf of the Dominion Property Group (DPG), to review and advise on the proposal for residential development of part of the Ah Yee Estate in Paynesville. In particular we have been requested to:

- provide advice on the key issues, opportunities and constraints to be addressed in a sustainable surface water management strategy;
- identify requirements for stormwater quality control and quantity controls on the site, both from the viewpoint of site drainage and upstream drainage inputs to the site;
- make recommendations on the primary components of such a strategy, including requirements for swales, wetlands and retardation basins;
- demonstrate that the strategy will satisfactorily comply with all relevant and contemporary best management practice objectives, and;
- complete functional design of the proposed wetland/retarding storage system.

2. **KEY INFORMATION**

The following key information has been provided by Watsons P/L and other consultant team members and used to assist in this review:

- 1. Base map plan defining local catchments.
- 2. Aerial photo of the property and surrounds. An extract is shown as Figure 1 in this report.
- 3. Previous development concept plan for the property (Chris Runting & Associates P/L Ref. 2585 Thompsons A) showing a large lake with island, and Town Planning Application Report by Coomes Planning and Gamcorp (October 2005).
- 4. Plan of existing conditions incorporating surveyed site contours at 200 mm intervals, remnant mature trees, and alignments, diameters and invert levels of existing pipelines located in Ashley and King Streets which provide drainage outfall to the subject land (Watsons Ref. 35531LF-A Rev B Sheets 1-3, 10/10/06).
- 5. New concept development layout plan for the estate including the existing residential development which abuts the east and south boundaries (Watsons Ref 35531CP-B, 16/9/06). This plan is shown on Figure 2 in this report and at larger scale on Figure 3. An extract of the Paynesville Structure Plan (C Runting & Assoc) covering the balance of the Ah Yee Estate is also overlaid on Figure 2. The road layout for the balance land west of the present application area shown on Figure 2 is indicative only and does not

form part of this current proposal. It has been included only to demonstrate how the subject land relates to its neighbours.

3. EXISTING CONDITIONS AND DRAINAGE CONTROLS

A detailed site inspection of the property, its surrounds, and the existing drainage outfalls was carried out on 21 July 2006. Neil Craigie also has long standing local knowledge of the area. Pat Condina was also involved in original water quality and biological monitoring of the first stages of the canal system in Paynesville.

The proposed development is part of the former Ah Yee Estate and has a total site area of 52.36 ha including 376 residential lots surrounding a feature wetland system and reserve area, as shown on Figure 3. On the east boundary existing road linkages occur at Ashley and King Streets. On the north boundary access is available to Bairnsdale-Paynesville Road. On the south boundary access is available to Newlands Drive.

Upstream of the site to the west and south lie the external catchment areas. Areas to the west total about 27.8 ha and include part of the Paynesville Cemetery (2.8 ha), part of the balance of the Ah Yee Estate (17 ha), and abutting land south of the Ah Yee Estate (8 ha).

(Note: It would a simple matter to provide a (low flow) drainage connection for up to a further 33 ha of the balance of the Ah Yee Estate within the catchment area to the Lake Peninsula wetland system, as shown hatched on Figure 2 (Note: this figure indicates an earlier structure plan arrangement of roads and reserves in the balance of the Ah Yee Estate land for illustrative purposes only). This 33 ha area is currently internally draining to some constructed dams and provision of a low flow invert at suitable depth to facilitate property development is problematic to the west and the north. It would also be possible for more land to the south of the Ah Yee Estate to be linked with the proposed drainage system should this be deemed appropriate by Council.)

To the south of the proposed site lies existing residential land totalling about 4 ha. These areas are serviced by Woodland Court and Newlands Drive. Pipelines discharging into the subject land are labelled on Figure 3. Access to the subject site is linked to Newlands Drive.

The survey plans show contours and mature trees on the site and existing outfalls to Ashley and King Streets. It may be noted that although site contours indicate a natural drainage outfall occurs to the Bairnsdale-Paynesville Road frontage in the north-east corner of the site, inspection shows that no outfall drain of any form has been provided at this location. Swampy conditions are evident on the land and in the abutting frontage with the main road and the plant nursery (see Photo 1).

The major natural drainage feature on the subject land is an existing ephemeral depression which extends in a southerly arc from near Ashley Street to an existing dam at King Street. Survey data indicates some surface drainage may occur towards Ashley Street from near the existing dams midway through the site but that the predominant direction of drainage is southerly to King Street with the lowest point on the property being about 12.0 m AHD. The natural depression and remnant trees provide the focus for open space and drainage layout. Photos 2-8 illustrate conditions along the depression to King Street and at the existing pipe outfalls.

The land has been used for grazing purposes and it currently supports a cover of mostly introduced pasture grasses amongst the remnant high value overstorey trees. A small remnant ephemeral wetland is also identifiable and is to be retained and enhanced as part of the reserve area. The existing dam at King Street is proposed to be removed although significant surrounding trees are to be retained.

Surface slopes are typically flat to gentle across the site with maximum slopes of about 1.5-2%.

Existing major drainage pipelines are located at both Ashley and King Streets and these represent the only available drainage outfalls for the subject land and the balance catchment areas.

At Ashley Street (see Photo 2) the pipeline is 1050 mm in diameter with invert level of 11.94 m. It has on-grade (0.5%) capacity of 2 m^3/s . Overland flows in excess of pipe capacity will follow the alignment of Ashley Street but under existing conditions may also pass through a reserve linkage to Hakea Street. An open drain has been excavated on the east boundary in a northerly direction to direct surface flows from the subject land into the pipeline at Ashley Street.

At King Street (see Photo 6) the pipeline is 1050 mm in diameter with invert level of 9.99 m. It has on-grade capacity (0.76%) of 2.4 m³/s. Overland flows in excess of pipe capacity will follow the alignment of King Street. Under existing conditions surface runoff from the site passes into the existing dam thence across the property boundary to the pipe inlet. The grated pipe inlet has poor safety characteristics at present and is subject to blockage with flood debris. Such problems need to be eliminated altogether with the proposed new drainage system for Lake Peninsula.

Drainage problems associated with overland flows have occurred at times along the King Street outfall. The proposed new residential development will provide the means to effectively overcome these problems. Peak flows from the new development will be maintained to existing conditions by utilising storage in the airspace above the proposed linear wetland system, and existing debris blockage threats to pipeline intakes will be resolved through appropriate hydraulic design.

4. THE SURFACE WATER MANAGEMENT STRATEGY

4.1 General Principles

Sound planning and good design can create systems where stormwater is an obvious and vital element of an urban area, and an attractive feature of the urban landscape.

From a holistic viewpoint the surface water management strategy for the subject site is to be developed to satisfy contemporary Best Management Practices (BMP), through application of the principles of Water Sensitive Urban Design (WSUD).

As set out in Section 1.3 of Australian Runoff Quality –A Guide to Water Sensitive Urban Design (IEAust 2006), the guiding principles of WSUD are centred on achieving integrated water cycle management solutions linked to an ecologically sustainable development focus aimed at:

- Treating urban stormwater to meet water quality objectives for reuse and/or discharge to surface waters;
- Using stormwater in the urban landscape to maximise the visual and recreational amenity of developments;
- Preserving the natural hydrological regime of catchments;
- Reducing potable water demand through water efficient appliances, rainwater and greywater reuse;
- Minimising wastewater generation and treatment of wastewater to a standard suitable for effluent reuse opportunities and/or release to receiving waters;

In regard to stormwater management ARQ 2006 lists best practice objectives as including:

- providing flood protection and drainage;
- protecting downstream aquatic ecosystems (including groundwater systems);
- removing contaminants;
- promoting stormwater elements as part of the urban form.

The new residential subdivision provisions in Clause 56 of planning schemes set out requirements for the design and assessment of residential subdivisions in urban areas throughout Victoria. The Clause 56 changes are supported by complementary State Planning Policy provisions for subdivision, changes in relevant zones and overlays and planning practice notes.

Under the provisions of the new Clause 56.07 all new residential subdivisions must now

comply with best practice management standards for water quality treatment and, unless approval is given to the contrary by the responsible authority and there are no detrimental impacts downstream, also ensure no increase in peak discharges stormwater from the development.

4.2 Site Values, Constraints and Opportunities

Selection of appropriate WSUD techniques must address the particular characteristics, constraints, opportunities and values to be protected on and around the site. For the subject site these are considered to be as follows:

- 1. Excavations for the existing dams and recent subdivisional drainage and road works on the east boundary and in the Stage 1 area, indicate that the clay soils on the site appear to be at least moderately dispersive. Subject to confirmation by geotechnical investigations, conservation of all available site topsoil will be important to provide adequate coverage and protection of underwater soil surfaces to mitigate turbidity concerns in any future water bodies. Environmental Management Plans for construction must also recognise constraints posed by site soils. This aspect is discussed further in Section 9.
- 2. There is no visible evidence of significant saline influences on the land but groundwater in this area is suspected to be at least brackish in quality. Regardless of any threat that may be posed by saline or brackish groundwater, lining of waterbodies is likely to be needed both to suppress the effects of soil dispersivity and to mitigate any seepage losses. Again the specific lining measures will be determined by geotechnical investigations.
- 3. The site receives surface inflows from an upstream catchment of about 28 hectares (with potentially an extra 33 ha or more in the former Ah Yee Estate further to the west) which will all ultimately be developed for mostly residential purposes. However for the present these areas will remain in rural condition.
- 4. Despite the fact that no water quality treatment facilities are in place to deal with pollution generated from existing urban development in the existing urban areas of Paynesville, compliance with best practice management objectives for water quality and quantity can and should be expected for development of the subject site. The new state planning provisions add weight to this.
- 5. Overland flooding problems have occurred downstream of the subject site. Future development must not increase peak discharges to the existing pipe outfalls in Ashley Street and King Street. New drainage works must resolve existing inlet debris blockage problems at Ashley and King Streets.
- 6. The remnant mature trees and the ephemeral wetland provide significant environmental and landscape values for the property and should be retained and protected wherever possible.

- 7. Existing outfall drains are piped underground at Ashley Street and King Street. However no outfall drain has been provided to a natural lowpoint in the northeast corner of the site on Bairnsdale-Paynesville Road. Existing waterlogging and surface drainage problems are evident at this location. The levels indicate opportunity exists to divert drainage from this corner south to Ashley Street and the proposed wetland system.
- 8. No major services traverse the site.
- 9. The subject land is gently sloping.
- 10. The proposed development will generate increased stormwater runoff from roofs and other impervious areas which must be properly managed to avoid aggravating existing drainage quantity and quality problems. This additional runoff could offer reuse supply opportunities within the site. It could also be used to support significant wetland development as part of the surface water management system.

4.3 Strategy Objectives

In no order of priority, the specific surface water management strategy objectives for the subject site are as follows:

- minimise offsite discharge of stormwater pollutants to the Gippsland Lakes, both during development and in the long term;
- ensure any offsite discharge of pollutants generated from the proposed urban development fully complies with best practice management objectives for environmental protection in receiving waterways and the lakes;
- take up practical opportunities for reuse of site stormwater, to reduce mains water input to the property and discharge of stormwater and pollutants, or alternatively use the water to support wetland development within the site;
- maximise the economic, environmental, aesthetic and recreational benefits of surface water throughout the development, while ensuring that such use does not result in any loss of user safety or creation of nuisance;
- mitigate existing flood threats to existing dwellings downstream of the site by ensuring no increase in peak discharges from the subject land and by upgrading drainage connections to existing outfalls in King Street and Ashley Street;
- protect all new development areas from flooding threats;
- protect the existing high value remnant overstorey trees wherever possible;
- retain and enhance the existing ephemeral wetland;

- design any future wetland system in sympathy with the natural topographic characteristics;
- design the Lake Peninsula drainage system to provide for the future drainage of lands to the west;
- subject to the above objectives being satisfactorily addressed, locate and design new surface water management assets to minimise capital investment and operation and maintenance costs in the long term.

4.4 WSUD Options

Constructed wetlands are one WSUD approach, where management response is concentrated into one or more defined areas. Other techniques that are currently being actively promoted by bodies such as Melbourne Water Corporation (MWC), the Department of Sustainability and Environment (DSE) and East Gippsland CMA and the EPA, focus on the site or precinct scale and are aimed at reducing runoff peaks, delaying runoff response and minimising transportation of sediments through the use of "natural" drainage line treatments, swale/trench infiltration systems, grass buffer strips and the like. WSUD techniques that can be applied at the site (individual lot) or precinct scale, offer potential for achieving required water quality treatment with reduced impact on developable land yield.

More recently, additional emphasis has been placed on re-use potential of stormwater to reduce mains water usage and downstream impacts of increased stormwater runoff frequency and volumes. This has a significant public profile at present during the prolonged major drought we are experiencing and long term sustainability of potable water supplies are of considerable concern throughout the state. Better management and integration of the urban water cycle is seen by most as being imperative for maximising longer term environmental improvements in our receiving waterways, lakes and bays, as well as for lowering the need for further water harvesting.

From the site values, constraints and opportunities, it is possible to short list and assess likely feasible WSUD options for water quality and quantity management on the subject site. Table 4 provides an overview of the general applicability of the range of WSUD techniques.

TABLE 4 APPLICATION OF WSUD TECHNIQUES TO PROPOSED RESIDENTIAL								
DEVELOPME	DEVELOPMENT IN THE LAKE PENINSULA ESTATE, BAIRNSDALE-PAYNESVILLE ROAD, PAYNESVILLE							
WSUD Technique	Applicability to subject development (H - High, M - Medium, L - Low)	Discussion						
Rain tanks - garden water supply only	М	Reduces mains water use if used properly but is relatively costly. No practical value in mitigating runoff if not used properly by owner. Unless very large tanks are used does not reduce flood peaks in wet seasons in any case.						
Rain tanks - toilet flushing and garden watering supply	Н	Reduces mains water use thoughout the year and is effective at reducing volume, frequency and peak rates of stormwater runoff, especially if large tanks are used (allowing some capacity to be reserved for flood event storage). If properly plumbed in to new housing during construction, operation is less dependent on owner acceptance and management as toilet flushing is constant through the year.						
Rain tanks - toilet flushing, hot water supply, and garden watering	М	Further reduces mains water use throughout the year and is very effective at reducing volume, frequency and peak rates of stormwater runoff. However it is even more costly in capital and operating terms owing to treatment requirements and extra plumbing costs associated with use in hot water supply systems. May be some health concerns and resistance from agencies and the community with hot water use.						
Roof water conveyed directly to normal gardens	L	Low cost, reduces runoff from site, but is restricted to small areas. Needs soil with acceptable drainage characteristics so that waterlogging and growth of rank weeds does not occur. Needs additional works to prevent uncontrolled discharge from site through other properties (eg., overflow connections to property drains, grading of gardens to drainage point and/or sealed pavements graded out to street). May be difficult to manage in longer term with property turnover. Not suited to land with erosive/dispersive soils.						
Roof water to constructed raingardens with underground drainage	L-M	Costly but reduces runoff from site. If combined with raintanks can reduce use of mains water but at further increased cost. Requires dedicated space and specialised vegetation and equipment and maintenance to function correctly. Best suited to higher density sites with body corporate management.						
Greywater to gardens	L	Health and maintenance concerns. Special approvals and monitoring required. Not favoured under current regulatory environment in normal residential development. Does not in any way mitigate generation of stormwater from development. Storage difficulties and possible detrimental impacts on plants and soils. Possibility of off-site discharge over wet seasons.						
Greywater to toilet flushing	L-M	Does not in any way mitigate generation of stormwater from development. Uncertain public acceptance due to poorer quality visual and odour characteristics. Storage difficulties.						
Parking Lot Storage	L	No significant water quality benefits. Nuisance to owners at the lot scale. Not suited to steeply sloping land.						
Porous pavements	L	High maintenance problems, noisy in residential environment. Porosity reduced by oil from vehicles. Little potential benefit in steeply sloping roads						

TABLE 4 APPLICATION OF WSUD TECHNIQUES TO PROPOSED RESIDENTIAL								
DEVELOPME	DEVELOPMENT IN THE LAKE PENINSULA ESTATE, BAIRNSDALE-PAYNESVILLE ROAD,							
		PAYNESVILLE						
WSUD	Applicability	Discussion						
Technique	to subject							
	development (H - High,							
	M - Medium,							
	L - Low)							
Grass buffer	M	Subject to traffic damage if not suitably protected. Problems with buildup						
strips		of retained sediment along edge of pavement. Land slopes are suitable						
1		throughout the area. Erosion problems are unlikely unless flow is						
		concentrated too much. Soil quality needs to be adequate to support grass						
		cover in dry seasons and this may be a limiting factor in this situation.						
Vegetated swales	L-M	Subject to traffic damage if not suitably protected. Can have problems with						
(supporting grass		buildup of retained sediment but not to the extent of the grass buffer strips.						
and or shrubs)		Land slopes are suitable throughout the area. Not suited to small lot						
		frontages - best used where roads front reserve areas and in median strips.						
Bioretention	М	Costly but reduces runoff peaks from site and improves water quality.						
systems		Requires dedicated space, protection from significant sediment inputs, and						
		specialised vegetation and maintenance to function correctly. Subject to						
		traffic damage unless suitably protected. Subject to blockage by excess						
		sediment load unless protected during estate and building construction phase. Not suited to small lot frontages - best used where roads front						
		reserve areas and in median strips. Are most effective if placed on the						
		outlets from ponds and wetlands. Land slopes are suitable throughout the						
		area. However suspected soil dispersivity may require lining of the						
		trenches to mitigate uptake of turbidity in drainage waters.						
Gross Pollutant	L	Not considered necessary for normal or lower density development except						
Traps		in litter-generating areas such as fast food sites and commercial shopping						
-		centres or strips. Temporary Nettech bag-type fittings on pipe ends would						
		suffice for construction period. Grated side-entry pits can also be used to						
		exclude gross pollutants from drainage systems and should be considered						
		throughout the proposed development. Wind blown litter needs to be						
		controlled during housing construction through appropriate site bins and						
		cages.						
Constructed	Н	Water quality treatment performance is provided together with improved						
wetlands		landscape and environmental values through good design. Airspace above						
		the wetland systems can provide necessary flood storage capacity where						
		maintenance of existing rural peak flows is a design requirement. Can also						
		be used as a cut/fill technique to optimize developable land yield in areas where flooding threat is low.						
Dry floor	L-M	Peak flow mitigation is needed to maintain flows to capacity of existing						
Retarding Basins	L. 191	drainage outfall, but dry floor retarding basin offers no ancillary						
Dubility Dubility		advantages in this location.						
Wetlands or	Н	As set out in Section 7.9 of the Urban Stormwater Best Practice						
sediment traps in	-	Environmental Management Guidelines, retarding basin sites can be easily						
retarding basins		adapted to incorporate water quality treatment facilities. For example, in						
		the greater Melbourne area many of Melbourne Water's most prominent						
		constructed wetland systems are located in flood retarding basins. Highly						
		appropriate in this situation.						

TABLE 4 DEVELOPME	TABLE 4APPLICATION OF WSUD TECHNIQUES TO PROPOSED RESIDENTIALDEVELOPMENT IN THE LAKE PENINSULA ESTATE, BAIRNSDALE-PAYNESVILLE ROAD, PAYNESVILLE						
WSUD Technique	Applicability to subject	Discussion					
rechnique	development						
	(H - Ĥigh,						
	M - Medium,						
.	L - Low)						
Irrigation/re-use	L	Part of a wetland area could be zoned out to provide some limited					
pondages		irrigation storage capacity. If pump distribution systems are provided this					
		pond area could be pumped down for irrigation of reserve areas without					
		endangering the wetland plantings. Reuse of the water is a valuable water					
		quality treatment measure. Use is limited by landscape and recreation					
		needs and by water level drawdown limitations. Unlikely to be viable in					
		this situation. Water reuse via individual raintanks is the preferred					
		approach.					

4.5 Strategy Components

To achieve the stated objectives the overall surface water management strategy is comprised of three components:

- 1. Site stormwater quantity management
- 2. Site stormwater quality management
- 3. Wetland and water feature management.

Based on existing site and surround conditions it is concluded that:

- On-site water quality and quantity control will be required for all parts of the development because of existing downstream flooding concerns and because all stormwater will eventually discharge to the Gippsland Lakes;
- Peak flow mitigation issues will be of key importance to avoid aggravating drainage problems downstream in existing residential areas;
- New surface water management assets should be designed so as to protect and enhance the existing values of the ephemeral wetland and the remnant overstorey trees;
- Provided peak flood flows are maintained at levels commensurate with existing rural conditions or the capacity of existing drainage outfalls and water quality is protected, the issue of seasonal and annual increases in volume and frequency of runoff from the site is not of significant concern. Increased (treated) freshwater runoff provides a potentially exploitable resource and is considered a benefit of the proposal.

Table 5 presents a compilation of issues and constraints for the site related to each strategy component, and suggests how these issues and constraints can be managed so as to ensure that proposed development could be successfully implemented on the site.

TABLE 5DISCUSSION OF SURFACE WATER MANAGEMENT STRATEGYCOMPONENTS IN THE LAKE PENINSULA ESTATE, BAIRNSDALE-PAYNESVILLE ROAD,						
COMPON		NESVILLE KOAD,				
Strategy	Discussion of issues and	Potential options for dealing with issue/constraints.				
Component	associated constraints					
Site stormwater quantity management	 There is an existing flooding threat to dwellings downstream of the site. The only available existing drainage outfalls for urban stormwater are the 1050 mm diameter pipes in Ashley and King Streets which have capacity of 2 and 2.4 m3/s respectively. No drainage outfall is available at a natural lowpoint in the north-east corner of the site at Bairnsdale-Paynesville Road. Pipelines and lined drainage systems lead to increased peak discharges in drainage lines. The upstream catchment will be developed in the future and impacts must be recognised and accommodated in the design of this property. Mains water input supply needs to be minimised wherever possible - stormwater offers supply opportunities. The existing ephemeral wetland should not be detrimentally affected by any new drainage assets. 	 Provide new drainage outfall pipe from NE corner of site in Bairnsdale-Paynesville Road (not recommended). Direct all stormwater from the NE corner of the subject land via pipeline around to the Ashley Street outfall. Allow all overland flows in excess of pipe capacity to follow natural alignment along the Bairnsdale-Paynesville Road frontage. Provide on site retardation in the airspace above a wetland system, sufficient to prevent increase in flows for all events up to and including 100 years Average Recurrence Interval (ARI). Use of open "naturalised" waterways, swales and integrated pondage systems in lieu of pipelines and lined channels increases time of concentration and reduces peak stormwater discharges in drainage lines. Stormwater reuse for internal house uses and allotment/public open space (POS) irrigation can reduce peak flows in local drainage lines, significantly reduce volumes of surface water discharged, and reduce mains water supply needs. Rainwater tanks are suited to individual house applications but will also reduce water supply to the wetland system. POS irrigation requires larger tanks or open pondages, which can have detrimental landscape and public safety implications. POS irrigation lisunlikely to be viable with the available runoff regime. Transfer all excess treated stormwater to Gippsland Lakes via existing outfall pipes. Major water features such as wetlands will increase evaporation losses and reduce excess surface water volumes generated from site development. Level and size drainage infrastructure in the subject land to suit future extension upstream, but not to resolve the obligations of those lands to meet similar water quality and quantity requirements within their boundaries (unless by mutual agreement). 				
Site stormwater quality management	 Stormwater generated on the site during subdivisional and building construction and lot establishment will contain high levels of sediments and adsorbed pollutants. Soil dispersivity is likely to be a significant threat. Stormwater generated on the site after development is 	 Prepare site Environmental Management Plans and implement site erosion prevention and control measures generally in accordance with the provision of "Construction Techniques for Sediment Pollution Control" (EPA Publication No. 275, 1991), and with Environmental Guidelines for Major Construction Sites (EPA Publication No. 480, December 1995) and with "Doing it right on subdivisions. Temporary environmental protection measures for subdivision construction sites" (EPA Publication No. 960, 				

Lake Peninsula Estate (Bairnsdale Road, Paynesville), Surface Water Management Strategy and Functional Design of Wetland Retarding System (Final Report)

TABLE 5DISCUSSION OF SURFACE WATER MANAGEMENT STRATEGYCOMPONENTS IN THE LAKE PENINSULA ESTATE, BAIRNSDALE-PAYNESVILLE ROAD, PAYNESVILLE						
Strategy Component	Discussion of issues and associated constraints	Potential options for dealing with issue/constraints.				
	 levels of nutrients, suspended solids and organic matter. These pollutants can adversely affect known high environmental and utilitarian values of the downstream receiving Gippsland Lakes, as well as any site water features. Stormwater flows from future proposed residential development will enter the site. Under existing conditions upstream catchments are rural and used for grazing purposes. 	 Current Victorian best practices for stormwater quality control aim to treat stormwater so that annual (post-development) SS, TN and TP loads are reduced by 80%, 45% and 45% respectively. Such objectives are seen as appropriate for the subject development and the catchment as a whole. Required reductions could be achieved by a combination of Water Sensitive Urban Design Measures (WSUD) including treatment wetlands, grassed swales, bioretention swales and stormwater capture and reuse. It is likely that treatment wetlands will be a favoured form of treatment, due to the ability to combine such treatment with over-riding flood storage requirements in the airspace overhead. The existing depression could be excavated and enlarged to create a major wetland system for water quality treatment as well as for flood storage. Provided they are of adequate size and plumbed to supply at least toilet supply, raintanks will significantly reduce mains water input and discharge of stormwater and pollutants. However as they would reduce water supply to the proposed wetland system their use could remain voluntary (under present regulations). Geotechnical investigations to confirm soil conditions and requirements (if any) for waterbody lining and lining of measures such as bioretention swales. 				
Wetland and water feature management	be formed within the existing depression, subject to Normal	 The design and water supply to a major feature wetland must result in sustainable aquatic systems which maintain good condition and do not cause nuisance (eg algae, mosquitoes, excessive water level drawdown), or compromise user safety. To maintain gravity discharge conditions, the NTWL of any water feature cannot be lower than the invert level of the existing 1050 mm diameter pipe drains at Ashley and King Streets. Direct all subdivisional drainage away from the ephemeral wetland, ensure constructed wetland NTWL is appropriate for protection of the ephemeral wetland hydrology and maintain adequate setback to new excavation to protect existing vegetation and overstorey trees. A linear wetland system along the existing topography. Any water feature may need to be suitably lined to protect against saline groundwater inflow and/or to prevent seepage losses of impounded water and/or to mitigate soil dispersion problems. Geotechnical 				

Lake Peninsula Estate (Bairnsdale Road, Paynesville), Surface Water Management Strategy and Functional Design of Wetland Retarding System (Final Report)

	TABLE 5DISCUSSION OF SURFACE WATER MANAGEMENT STRATEGYCOMPONENTS IN THE LAKE PENINSULA ESTATE, BAIRNSDALE-PAYNESVILLE ROAD, PAYNESVILLE							
Strategy Component	Discussion of issues and associated constraints	Potential options for dealing with issue/constraints.						
	 feature should be designed as a freshwater system and be protected from any potential saline groundwater inflows and possible seepage loss. Storage of stormwater will be required to provide adequate treatment for stormwater generated on the site. Sustainability of any wetlands and water features will depend on managing the seasonal levels of phosphorus and on limiting the longer term accretion of phosphorus – so as to limit the potential for algal blooms. Allotments must be sited so as minimise potential nuisance problems associated with water features of all forms. The long-term management of any wetland and open water pondage systems may need to be resolved through discussions with Council. 	 investigations will be key requirements in the detail design process for the wetland to confirm the need for lining. Provide at least 15 m offset between any new allotment and the waters edge of wetlands and sedimentation ponds. Incorporate treatment wetland features into inlet and perimeter zones of each open water pond. Design edge profiles to promote user safety and to disguise drawdown due to evaporation or irrigation use. Consider option for pumped recirculation of water through wetland areas to reduce nutrient levels and support ecological systems. Small solar powered pumps and possibly windmills are options. Prepare appropriate maintenance and operation procedures as part of the asset design process. Avoid creating lakes. Instead provide open water areas within wetland systems so as to use all water bodies for effective water quality treatment. Provide adequate maintenance access space and working surface to all inlet zones of wetlands and to all control structures on water features. Integrate recreational access with maintenance access. 						

4.6 Quantifying Water Quality and Quantity Impact Mitigation Needs

Figure 3 shows the proposed estate layout with the major wetland and park system. A total of 43.39 ha of land is proposed for 376 residential lots including roads with the balance of 8.97 ha set aside for reserves.

Based on the average lot yield estimate of 8.7 lots/hectare, surface imperviousness across the local residential catchments will average no more than 40% after development.

<u>In regard to water quantity management</u>, future peak flood flow rates and runoff volumes will be dependent not only on development density, but also the form of the drainage system (eg., hard-lined or natural waterways), the extent of water retention/retardation provided in the development and the extent of water reuse (eg., for garden and public open space irrigation or toilet flushing), or diversion or loss via seepage and evapotranspiration.

Recent detailed studies for other developments (using the RORB hydrologic model), have established that for an average imperviousness of 50% and fully piped drainage systems, active flood storage volumes of up to 500 m³/ha of development would be needed to fully offset the impact of development on <u>peak</u> flood discharges, back to existing rural conditions for all events up to and including the 100 year ARI event. For the 40% average imperviousness applicable to this site an upper limiting estimating rate of about 400 m³/ha would be appropriate.

This would imply a total upper limit development flood storage volume of 400 * 43.39 ha = 17,356 m³ (17.4 ML) As part of the functional design of the wetland (Section 6) the RORB model is used to confirm actual storage volumes required and maximum flood levels in the various cells.

In regard to <u>water quality treatment</u>, contemporary best practice water quality treatment standards for urban drainage are usually as follows:

- 100% removal of gross pollutants (GP) >20 mm in 3 months ARI flow (sometimes increased to 6 month ARI flow);
- 80% reduction in suspended solids (SS) loads;
- 45% reduction in total phosphorus (TP) loads;
- 45% reduction in total nitrogen (TN) loads.

These standards should and can be met within the subject site.

Stormwater treatment on greenfields sites is usually provided as three components:

(i) Removal of litter from the flow from larger portions of the catchment. Residential sub-catchment areas would not normally be provided with permanent litter traps unless they included substantial commercial premises.

(ii) Trapping of sediment and coarser suspended solids in an appropriately sized sediment trap. This may also be designed to trap litter.

(iii) Removal of nutrients, bacteria, fine suspended solids and other associated pollutants in a wetland treatment facility or in a Bio-Retention Swale (BRS) or in vegetated

swales or in some combination of these. Treatment is normally provided up to the 1 year ARI flow.

The MUSIC model (Version 3) has been used to derive the wetland area required for compliance with best practice management standards. For extended detention depth of 500 mm the required wetland area was found to be 1.75 ha, assuming existing external catchment conditions and full development of the Lake Peninsula Estate. Hence the wetland also serves existing residential development in Newlands Drive, plus the cemetery. This wetland area could be reduced by addition of other WSUD features such as swales and reuse, but with the need to provide flood storage in an efficient way, water surface area needs to be maximised.

It may be noted that with water surface area at NTWL of 1.75 ha the upper limiting flood storage volume of 17.4 ML is provided with just 1 m rise in water levels. The concept design presented in Section 6 provides at least 1.5 m depth of air space to 100 year ARI flood levels and slightly larger water surface area (1.9 ha). This raises the prospect of any excess storage capacity provided in the Lake Peninsula system being able to accommodate further development of upstream lands, subject to appropriate compensation arrangements being negotiated.

<u>Water reuse</u> at the lot scale offers substantial savings in mains water input and discharge of surface water and pollutants to the environment. With 5,000 L raintanks on each lot, plumbed for toilet flushing (120 L/day/lot) and garden irrigation (4 ML/yr/ha on 60% of non-roof area), and with 0.5 m depth reserved for peak flow mitigation, the MUSIC model has shown that mains water input could be reduced by up to 1.1 ML/yr/ha, with stormwater quantity discharge reduced by about 30% which would go a long way towards achieving best practice management standards for residual stormwater quality discharge.

However a 30% reduction of inflows to the wetland would in turn reduce potential wetland area and volume and therefore compromise storage efficiency for flood mitigation.

Hence in this instance the favoured approach to water reuse is via transfer of the excess water to the main wetland system with overflow out to the Gippsland Lakes after treatment in the wetland.

4.7 The Recommended Strategy

The foregoing sections point to the following items as being key ingredients of a sustainable surface water management strategy for the Lake Peninsula Estate:

- 1. Utilise the existing 1050 mm diameter pipe outfalls in Ashley Street and King Street for all drainage from the estate.
- 2. Divert 5 year ARI pipe drainage flows from the northern catchment area along Bairnsdale Road around the east frontage to Ashley Street outfall. Allow overland flows to follow natural catchment gradients.
- 3. Create a linear wetland/retarding storage system in the 7.35 ha reserve between Ashley and King Streets. The wetland area is to be sized to ensure that best practice urban stormwater quality treatment standards are met and that adequate active flood storage is provided in the airspace above NTWL so that no increase in peak discharge at the Ashley and King Street outfalls occurs as a consequence of the development of Lake Peninsula Estate.
- 4. Direct all low flow drainage from Lake Peninsula to the King Street outfall to encourage linear water flow through the entire wetland system.
- 5. Provide 5 year ARI pipeline and 100 year ARI overland flow drainage connections through Lake Peninsula to the western boundary at suitable depth to pick up drainage from future residential development of abutting lands (including the potential additional low flow outfall from the 33 ha balance of the Ah Yee land across to Grandview Road).

Apart from existing development discharges in the Newlands Road catchment (which need to be accounted for in the design of the wetland asset), Lake Peninsula is not obligated to provide water quality treatment or peak flow mitigation capacity for such future development.

6. Lay out the Lake Peninsula development so as to provide for safe passage of overland flows throughout.

All roadways should grade out to free drainage outfalls without creating trapped lowpoints. Finished surface levels of all lots should have not less than 300 mm freeboard above proposed 100 year ARI water levels anywhere in the development. No allotments should be created over any potential overland flowpath. All overland flows should be directed from the road system into the wetland/retarding storage by appropriate leveling and grading.

- 7. Transfer all excess stormwater to the Gippsland Lakes after treatment in the new wetland.
- 8. Selectively use other WSUD approaches over the rest of the site only as desired for demonstration purposes.

Due to the need for flood storage volumes, wetland area is sufficient to address all site development and existing upstream catchment water quality management issues, without other WSUD techniques being necessary. However techniques such as vegetated and/or bioretention swales could be employed in median strips of divided roads and where any road fronts a reserve area.

5. WETLAND/RETARDING STORAGE FUNCTIONAL DESIGN

5.1 Layout and Design

As set out in Section 4.7 the wetland water surface area needs to be at least 1.75 ha with up to 17.4 ML of active flood storage volume in the airspace above NTWL below 100 year ARI flood level, in order to meet the specified stormwater quality and quantity management objectives.

The functional design arrangement shown on Figure 4 meets these design objectives whilst addressing the natural fall through the reserve from the north to the south and providing a key landscape focus for the development within the reserve.

Pipeline inlet locations are matched with inlet sediment traps and these areas, which will have steeper subsurface bank slopes to facilitate maintenance cleanout, are fenced out to discourage public access. Only standard rural fencing with plain wires is required as the objective is to discourage public access of these areas not completely prevent it.

All wetland hydraulic controls are locked within sealed pits setback from the wetland areas with submerged takeoff pipes for safety, protection from debris blockages and best aesthetics. The concept designs on Figures 5-7 include gate valves for maintenance drawdown of both pondages.

Figures 8 and 9 provide standard concept detail for wetland edges and porous rock filters.

The northern inlet sediment trap and pipe/pit control systems have already been constructed as part of the Stage 1 development. Refer to Figure 5.

The physical characteristics and catchment area data for the upper and lower wetland cells and flood storages are summarized in Tables 6-8.

<u>Geotechnical investigations</u> will be required during detail design to confirm lining requirements for the wetland.

It will be important to ensure the wetland base is as watertight as possible to mitigate seepage losses. It will also be essential for any dispersive subsoils to be fully covered with topsoil to mitigate ongoing high turbidity problems. <u>At this time it is recommended that allowance be made for at least 150 mm of suitable topsoil to be spread over the entire water pondage areas.</u>

TABLE 6 Components of Stormwater Quality Treatment System for Lake Peninsula Estate								
Component	NTWL (m)	Area at NTWL (m ²)	Volume at NTWL (m ³)	Extended detention depth				
				(m)				
Upper Wetland Cell	12.50	10,600	7,500	0.5				
Lower Main Wetland	11.00	8,400	5,800	0.5				
Totals		19,000	13,300					

	TABLE 7 Catchment Areas									
Wetland Cell	External Rural	Cemetery	Lake Peninsula Development	External Residential	Lake Peninsula	Total				
					Reserve					
Upper	7.5	2.8	27.70 Residentialt	-	4.5	42.50				
Lower	17.5	_	17.30 Residential	4.0	2.85	41.65				
Totals	25.0	2.8	45.00 Residential	4.0	7.35	84.15				

ТАВ	LE 8 Sta	ge-area-storag	e relations for	Lake Peninsula flood pondages
Flood Stage Pondage (m)		Area (m2)	Active Storage (m3)	Comments
Upper	12.50	10,600	-	NTWL of main pool and wetland area
	13.00	14,200	6,200	Top of extended detention storage
	14.00	22,900	24,750	
	14.50	25,000	36,725	
Lower	11.00	8,400	-	NTWL of main pool and wetland area
	11.50	14,200	5,650	Top of extended detention storage
	12.00	12,900	12,425	
	12.50	14,300	19,225	

5.2 Flood Modelling

A RORB hydrologic model was established to simulate flood runoff from the catchments for proposed full development of the subject site with the proposed wetland/retarding storages. Existing upstream catchment areas were assumed to remain in their current state as set out in Table 7. The model was run in trial and error mode varying hydraulic controls on both storages to check relationships between the peak discharges to Ashley Street and King Street outfalls and flood levels within the storages.

TABLE 9	Adopted hydraulic controls for Lake Peninsula Wetland/Retarding Storages				
Flood	Low flow	High flow	Comments	Concept Details	
Storage	controls	control			
Upper	200 mm	3 m weir to	Set low flow pipe as submerged	Figure 7 for low	
	orifice bend	Ashley Street	orifice in pit at south end of	flow	
		outfall at 13.60	wetland to draw water off 300	Figure 5 for high	
		m crest level	mm below NTWL.	flow	
			Set high flow weir in sealed pit		
			on Ashley Street outfall		
Lower	2*150 mm	3.3 m weir to	Set low flow pipes as	Figure 6	
	orifice bends	King St outfall at	submerged orifices to draw		
		11.50 m crest	water off 300 mm below		
		level	level NTWL. Combine high and low		
			flow outlets in one pit on King		
			St outfall with submerged		
			takeoff pipes from wetland		

The adopted outlet controls are listed in Table 9.

The RORB model showed that critical storm duration varied with 30 hours in the upper storage and 9-30 hours in the lower storage. Key results for various ARI's are listed in Table 10.

TABLE 1	TABLE 10RORB model results for Lake Peninsula full development with existing upstream								
	catchments								
Flood	odARIDurationPeakPeak OutflowPeak Outflow				Peak				
storage			Level (m)	(m3/s)	to Ashley St (m ³ /s)	Storage (m ³)			
Upper	1	30	13.03	0.06	-	6,760			
	5	30	13.46	0.08	-	14,800			
	10	30	13.62	0.13	0.03	17,800			
	20	30	13.73	0.33	0.23	19,800			
	100	30	13.92	0.91	0.81	23,200			
Lower	1	30	11.53	0.11		6,020			
	5	30	11.68	0.48		8,150			
	10	12	11.73	0.63		8,730			
	20	9	11.78	0.82		9,430			
	100	9	11.96	1.64		11,900			

The results in Table 10 show that peak 100 year ARI water levels are below the limiting levels, peak discharges are less than the peak capacities of the existing outfalls in Ashley and King Streets. Therefore the hydraulic design performance objectives are confirmed..

Trial runs were then carried out to check the limiting storage performance of the Lake

Peninsula system with all upstream catchments fully developed.

The results in Table 11 show that the system as designed is capable of effectively mitigating peak flows up to the 100 year ARI event for the natural catchment upstream of Lake Peninsula when that land is fully developed as well.

	TABLE 11 RORB model results assuming full catchment development				nent	
Flood	ARI	Duration	Peak	Peak Outflow	Peak Outflow	Peak
storage			Level (m)	(m3/s)	to Ashley St	Storage (m ³)
					$(\mathbf{m}^{3}/\mathbf{s})$	
Upper	1	30	13.06	0.06	-	7,230
	5	30	13.51	0.09	-	15,600
	10	30	13.64	0.16	0.06	18,200
	20	30	13.75	0.37	0.27	20,100
	100	30	13.93	0.96	0.85	23,400
Lower	1	30	11.56	0.17		6,490
	5	30	11.71	0.55		8,450
	10	12	11.76	0.75		9,170
	20	9	11.85	1.13		10,400
	100	9	12.02	1.95		12,700

5.3 Water Quality Modelling

The linear wetland system was modeled using MUSIC Version 3 with the 6 minute rainfall data sequence for Bairnsdale between 1973 and 1982, and assuming full development of Lake Peninsula with existing upstream catchments.

Pollutant treatment performance complies with best practice standards and is summarized in Table 12.

TABLE 12 MUSIC Model results for Lake Peninsula Estate wetland system, Paynesville				
Parameter	Wetland Cell	Total Source	Residual Load	% Removal
		Load		
	Upper			
Flow (ML/yr)		140	126	10
TSS (Kg/yr)		23,200	3,090	87
TP (Kg/yr)		50.0	15.6	69
TN (Kg/yr)		369	191	48
Gross Pollutants (Kg/yr)		4,430	0	100
	Lower=catchment			
	outfall			
Flow (ML/yr)		250	225	10
TSS (Kg/yr)		40,200	6,210	85
TP (Kg/yr)		89.0	29.5	67
TN (Kg/yr)		657	354	46
Gross Pollutants (Kg/yr)		7,410	0	100

These results confirm that upstream external catchment areas will be required to provide separate stormwater quality treatment facilities when development occurs.

6. DESIGN AND FUTURE MANAGEMENT OF WETLANDS AND PONDS

The water quality within the wetlands and ponds will to a large extent reflect the quality of their water sources. The water quality regime and their stormwater treatment capacity will however depend on other factors as well including:

- wetland and open water design including depth, area and length of shoreline,
- wetland and open water processes including wind and flow induced mixing, precipitation and flocculation mechanisms, and sediment-water column interactions,
- inputs of local groundwater,
- the chemical nature of the local soils,
- water residence times,
- physico-chemical and biological processes within the water bodies,
- degree of use by birdlife,
- degree of colonisation by water plants.

Detention of stormwater in any wetland or pondage for extended periods could lead to the following important water quality responses:

- Increases in algal and plant growth,
- Decrease or increase in turbidity and suspended solids,
- Increase in daytime oxygen levels and night time depletion,
- Decrease or increases in levels of phosphorus and nitrogen in the water column.

Whether water quality is actually improved or not will depend on the nature of physical, chemical and biological processes occurring within the wetlands and ponds.

During most periods the wetland or pondage system will tend to improve input water quality due to the biological and physical processes within it.

A critical issue to the site is the availability of sufficient water through summer and autumn to ensure adequate turnover of the water bodies (from 20 to 30 days preferably), particularly through drier years.

With mean annual outflow of 225 ML/year and impounded volume of 13.3 ML, the mean detention time of the system is 21.5 days. This assumes only the Lake Peninsula Estate is developed.

The species and numbers of organisms that can live in any aquatic system is dependent on many factors including flow regimes, water quality, food supply, riparian zone inputs, shading, competition and habitat. Habitat and habitat diversity will strongly determine the species and numbers of organisms found. In the absence of suitable habitat very few species will be found even in water bodies with excellent water quality (e.g. as in a local water supply storage reservoir). Generally the greater the habitat diversity in a water body the higher the number of species found.

Aquatic plants can provide food and shelter to invertebrates and fish. A range of aquatic

plant species could naturally colonise any water body once it is filled, however it would be preferable to accelerate this process (and ensure desirable species) by extensive plantings of aquatic plants known to be indigenous to this area.

Healthy populations of water plants should be encouraged to develop in and around the wetlands and ponds as quite apart from their habitat value they:

- Take up nutrients that would otherwise be available for algal productivity,
- Can be a visually attractive and interesting part of the aquatic system,
- Give the system a more natural, less artificial appearance,
- Protect the edges from erosion, and make water level fluctuations less obvious.

Of course there is always the possibility that one or more species could grow in nuisance proportions (especially Typha species) but attention to monitoring and maintenance, and early control will prevent such conditions from arising. Depending on the rates of growth of aquatic species some harvesting may be required in future.

Wetland plantings should be selected primarily for water treatment purposes, but other species should also be included for the purpose of increasing ecosystem diversity and landscape interest.

Peak flood flow velocities of 0.5 m/s or less will not present any safety threat to users of the reserve nor to the wetlands or flora/fauna communities that will be established. Detail design must incorporate a number of best practice features as summarised in Table 13. The functional design shown on Figure 4 complies with all of these recommendations.

A suggested planting schedule of native submerged and emergent aquatic plants to be established at an early stage is shown in Appendix A. The design provides adequate open water to enhance landscape amenity, address vital hydraulic protection constraints, add to water treatment capability (eg., E.coli) and provide fish habitat (cover, diversity and shade).

A maintenance and monitoring strategy is important. Monitoring or inspection can be carried out as part of overall system maintenance. Minimal chemical and biological monitoring will be required to assess the systems performance and its satisfaction of objectives for improved water quality and environmental values.

A monitoring program will also be required to track water quality and wetland performance particularly for suspended solids and nutrient concentrations. Biological monitoring of algal, plant, invertebrate, fish and amphibian populations is also recommended.

The monitoring program will need to specifically target conditions within and around the sediment trap basins on pipe inlets.

TABLE 13 Optimisation of wetland and pondage performance				
Objective	Means of Achievement			
1. That wetland or	Periodic monitoring of water quality.			
pondage conditions are consistent with desired	 Layout design (size, shape, depth, plantings etc.) to maximise uses and habitat diversity. 			
beneficial uses.	Landscaping and native riparian plantings to create a natural vista.Edge design for safety.			
2. That the flora and fauna values of the wetland or pondage system are maximised.	 Maximisation of physical habitat diversity through variation in shape, depth, substrate and aquatic plants. 			
3. That the wetland or pondage does not adversely impact on the enjoyment, safety or amenity of users.	 Avoidance of high edge slopes and grading of side slopes (at least 1V:8H for 2.5 metres from edge grading to maximum of 1V:3H). Avoidance of localised depressions in which mosquitoes could breed. Minimisation of sediment inputs especially during the site redevelopment period. 			
4 771	Formulation of on-going maintenance and monitoring program.			
4. That intractable water quality problems do not result within the wetlands or pondages.	 Restrict maximum depths to about 2.5 metres at most so stratification and low dissolved oxygen conditions are unlikely to occur. Greater depths could require artificial recirculation assistance (eg., air bubblers). Minimise impact of spills from upstream areas by confining these to inlet 			
	 sediment traps (eg., through submerged outlets). Avoid use of fertiliser in adjacent landscaped areas as these can be significant sources of nutrients and promote algal blooms. The water contained within the wetlands and pondages may be used for irrigation of abutting reserves subject to drawdown limits of about 100 mm to protect dependant aquatic vegetation Consider need for <u>full topsoiling of all underwater surfaces</u> to suppress soil dispersivity concerns (after geotechnical advice) 			
5. That the wetland or pondage does not create any adverse downstream impact.	 None anticipated. The wetland system will in fact provide significant treatment for site and catchment runoff. Implement Site Best Management Practices during construction, especially to minimise generation of sediment in the construction phase and to collect sediment in the sediment traps. Consider need for <u>full topsoiling of all underwater surfaces</u> to suppress soil 			
	dispersivity concerns (after geotechnical advice)			
6. That the wetland or	Good wetland and sediment trap design.			
pondage does not require an unreasonable degree of maintenance input.	 Diverse wetland plantings to avoid one species taking over. Minimisation of constructed assets and simplified operation of hydraulic controls. 			
	 Provision of adequate depth in shallow bench zones and throughout wetlands to allow for inevitable extra sediment generation input in early times and for longer term organic deposition. Provision of sediment traps to confine the bulk of deposition and minimise disruption and cost of cleanouts. Sediment trap areas may need desilting anywhere from 2 to 5 years after reset on completion of all development. 			
7. That the wetlands or pondages are effective in	Achievement of stormwater residence times of days rather than hours.Passage of urban runoff through a number of discrete cells rather than one			
removing pollutants from stormwater runoff.	 Provision and maintenance of sediment traps. Design for development as modified natural ecosystems where biological processes can also operate to treat urban runoff. 			
	• Optimisation and protection of aquatic plant growth.			

7. POTENTIAL WATER QUALITY PROBLEMS AND RESPONSES

Detention of stormwater and groundwater in the wetland and pondage system for extended periods with little inflow could lead to some potential problems. These are considered in Table 14. While there is a moderate- low possibility of problem occurrence for the system if it is established as recommended, the table serves as a useful compilation of the water quality risks that must be addressed through appropriate design, maintenance and monitoring.

LE 14 POTENTIAL WETLAND WATER QUALITY PROBLEMS
Discussion
Oxygen depletion is unlikely to occur in the wetland system unless stratification develops. The sedimentation of organic materials leads to growth of benthic microbes that feed on this organic material. Such growth depletes oxygen from both the sediments in the benthic layer and the overlying water column. This can create anaerobic conditions and release other pollutants trapped in the sediments. This is unlikely to occur in the wetland system proposed due to the online nature of the system, and the maximum depth of 2.5 m which prevents stratification and promotes mixing over the full water column. Furthermore the aquatic plants will unsure that oxygen depletion is unlikely.
Runoff typically contains high levels of micro-organisms sourced from animal droppings, illegal connections to stormwater, and sewer leaks or overflows. E.coli levels can increase in storm events. Roof runoff could have high levels depending on bird populations. Bacterial die-off processes in the wetland would ensure that microbiological
objectives are achieved at all times excepting following a high runoff event. Algal occurrence and growth is influenced by a number of factors as already discussed. The primary factors affecting algal productivity are total phosphorus and total nitrogen concentrations. As is the case for most waterbodies, the levels of these nutrients in the wetland will be in the range where mild blooms could potentially occur. It is anticipated that some green algae will grow, especially as growths attached to aquatic plant stems. The occurrence of limited growths of filamentous algae and unicellular green algae is natural and should not be of concern. Strong growths may also occur in warm dry periods. It is probable that some attached algal species will also grow on plant surfaces. Again the frequency and severity of such growth will be related to the factors outlined above.
Experience with many other wetlands throughout greater Melbourne and elsewhere indicates that the frequency of blue green algal blooms is low. Optimum growth conditions for blue green algae occur when, apart from abundant nutrients, there are long periods of sunlight and relatively calm and still conditions. The presence of low numbers of blue green algae in a waterbody is quite normal; it is bloom conditions that are of concern because of the aesthetic deterioration and the ability of some species to produce toxins. The most powerful control mechanisms for algae are biological controls rather than
structural responses. It is therefore important that the wetland develops as a viable aquatic ecosystem, which supports macrophytes, invertebrates, amphibians and fish. The potential for mosquito hazards can be minimised through adoption of appropriate design and the establishment of a robust ecosystem. Design measures for minimising the possibility of mosquito nuisance include:
 grading banks to ensure free shedding of water following draw down of floodwaters; adoption of an edge grading of slope 1 in 8 with an edge lip of at least 200 mm and a minimum depth of 300 mm; shaping to provide efficient circulation of flow; Selection of aquatic plants which do not have broad leaves above the surface to

ТА	BLE 14 POTENTIAL WETLAND WATER QUALITY PROBLEMS
Problem	Discussion
	minimise substrate for mosquito breeding. Floating vegetation should be discouraged as it may support a diverse mosquito fauna.
	All of these measures have been incorporated into the wetland design. Mosquito problems have rarely been observed in any wetland where the above precautions have been taken.

8. WETLAND MAINTENANCE AND MONITORING

Good wetland design is only part of the total requirement. Without adequate operation and maintenance procedures the wetland will reach a stage where it can no longer effectively carry out its design function. A maintenance and monitoring strategy will need to be developed and implemented. Monitoring or inspection can be carried out as part of overall system maintenance. Minimal chemical and biological monitoring should be carried out to assess the systems performance and its satisfaction of objectives for improved water quality and environmental values. Maintenance and monitoring programs can be expected to annually cost some 3% of the initial capital costs over the first few years but for a well designed system can reduce to below 1% in later years.

Operation and maintenance requirements of the wetland can be considered under general maintenance, special maintenance, and monitoring (Table 15).

TABLE 15 General Maintenance and Monitoring Requirements for Wetlands			
General maintenance	Special maintenance	Monitoring	
 Clearing inlet zone of litter Maintenance of, grates and outlet structures Control and management of weed growth along wetland margins Maintenance and reinstatement of edge erosion following large flows Desilting of sediment traps Collection of litter on margins Planting and vegetation management Fish stocking 	 Removal of polluting materials from system following a local pollution spill Replacement of aquatic plants 	 Routine water quality monitoring according to a set program especially for nutrient levels and presence of blue green algal cells Monitoring of sediment accumulation rates in sediment traps Weed and aquatic plant monitoring Monitoring of other uses and activities including water bird numbers and user activities 	

9. CONSTRUCTION STAGE MANAGEMENT

The construction phases of the wetland and pondage system development and subsequent building works must also be properly managed to ensure environmental values are protected along the way. To do this, Site Environmental Management Plans (EMP's) will need to be prepared to address construction-related impacts. These plans would be submitted for approval prior to commencement of works on each stage or group of stages as the case may be.

Key items to be factored into the EMP's are as follows:

- All site works are to be carried out in accord with contemporary best site management practice.
- Implement erosion prevention and control measures generally in accordance with the provision of "Construction Techniques for Sediment Pollution Control" (EPA Publication No. 275, 1991), with "Environmental Guidelines for Major Construction Sites" (EPA Publication No. 480, December 1995), and with "Doing it right on subdivisions. Temporary environmental protection measures for subdivision construction sites" (EPA Publication No. 960).
- Areas of disturbance should be kept to a minimum on each stage and stage works areas clearly fenced to prevent machine access or materials storage elsewhere.
- Construct and establish wetland excavations to act as sedimentation pondages (in segments as appropriate to scale of stage development), as part of initial construction. Establishment of appropriate aquatic vegetation communities can follow in the subsequent season.
- Divert runoff from undisturbed areas away from active works areas.
- Locate soil stockpiles at least 20 metres from any drainage line or pit.
- Remove soil and clay from tyres before trucks leave site.
- Remove foreign soil and plant matter from trucks before entering site.
- All significant vegetation to be retained should be fenced out prior to commencement of any site works within appropriate setbacks.
- The remnant ephemeral wetland is to be retained and should be fenced out prior to commencement of any site works within appropriate setbacks. No stormwater drainage from construction areas is to be discharged to this wetland.
- Timing and frequency of maintenance activities including removal of sediment from sediment ponds and swales should be clearly designated.

10. SUMMARY AND CONCLUSIONS

This report outlines the surface water management strategy for the Lake Peninsula residential estate at Paynesville and presents the functional design for the major linear wetland/retarding storage system.

Section 4.7 summarises the strategy components whilst Section 5 details the functional design of the wetland/retarding storage system, flood modeling and water quality treatment outcomes.

The RORB hydrologic modeling has shown that with the functional design in place for the wetland/retarding system and full development of Lake Peninsula Estate:

- peak 100 year ARI water levels are below the limiting levels (14.0 in the upper segment, 12.0 in the lower segment):
- 100 year ARI peak discharges are less than the peak capacities of the existing outfalls in Ashley and King Streets.

Therefore the hydrologic and hydraulic design performance objectives are confirmed. The Lake Peninsula development will significantly improve the standard of stormwater drainage service to existing developments downstream.

Trial runs were then carried out to check the limiting storage performance of the Lake Peninsula system with all upstream catchments fully developed as well. The RORB results in Table 11 show that the system as designed is capable of effectively mitigating peak flows up to the 100 year ARI event for the natural catchment upstream of Lake Peninsula when that land is fully developed as well.

The linear wetland system was modeled using MUSIC Version 3 with the 6 minute rainfall data sequence for Bairnsdale between 1973 and 1982, and assuming full development of Lake Peninsula with existing upstream catchments. Pollutant treatment performance complies with best practice standards and is summarized in Table 12.

The MUSIC results also confirmed that upstream external catchment areas will be required to provide separate stormwater quality treatment facilities when development occurs as there is insufficient capacity in the Lake Peninsula wetland system to fully deal with those additional flows from a water quality perspective.

<u>Geotechnical investigations</u> will be required during detail design to confirm lining requirements for the wetland. It will be important to ensure the wetland base is as watertight as possible to mitigate seepage losses. It will also be essential for any dispersive subsoils to be fully covered with topsoil to mitigate ongoing high turbidity problems. <u>At this time it is recommended that allowance be made for at least 150 mm of suitable topsoil to be spread over the entire water pondage areas.</u>

Neil M Craigie and Pat Condina

11. ABBREVIATIONS AND DEFINITIONS

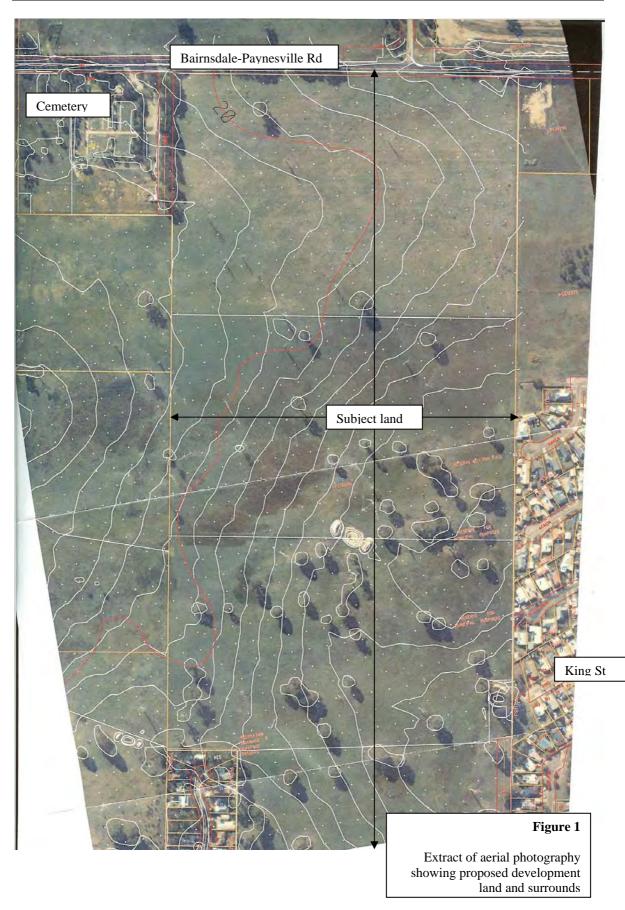
AHD	Australian Height Datum. Common base for all survey levels in Australia. Refers to		
AID	height in metres above mean sea level.		
ADI	e e e e e e e e e e e e e e e e e e e		
ARI	Average Recurrence Interval. The average length of time in years between two floods of a		
F 1 1	given size or larger		
Ephemeral	Waterways which flow for only short periods of time after significant rainfall events.		
	Also refers to wetlands which are either rarely inundated or only inundated for a very		
	short period of time.		
Evapotranspiration	The loss of water to the atmosphere by means of evaporation from free water surfaces		
	(eg. dams or lakes or wetlands) or by transpiration by plants		
Groundwater	All water stored or flowing below the ground surface level		
На	Hectare (10,000 square metres)		
Km	Kilometre (1000 metres)		
m ³ /s	Unit of discharge = cubic metre/second		
ML	Megalitre (1000 cubic metres)		
NTWL	The Normal Top Water Level (m AHD) or water surface level of a waterbody when just		
	full to low flow overflow level.		
Pond	A small artificial body of open water (eg. dam or small lake)		
Retarding basin	A flood storage dam which is normally empty. May contain a lake or wetland in its base		
Sedimentation basin	A pond that is used to remove sediments from inflowing water mainly by settlement		
(sediment pond)	processes. Edge zones may have similar appearance to wetland margins.		
Surface water	All water stored or flowing above the ground surface level		
Swale	A drainage line with essentially trapezoidal cross-sectional form. Can have rocky or soil		
	bed form, be fully vegetated with indigenous species, or grassed. The base can be fitted		
	with a filter zone to further assist in pollutant removal (termed a bio-retention swale).		
	Foundations can be ripped to encourage seepage losses in suitable soils.		
Waterlogging	Term used to describe saturated surface soil conditions where some free surface water		
	may also be present		
Wetland	A transitional area between land and water systems which is either permanently or		
	periodically inundated with shallow water and either permanently or periodically supports		
	the growth of aquatic macrophytes (eg. swamp, marsh, fen, bog)		
	The Brown of aquate matrophytes (eg. swamp, matsh, ten, 005)		

12. **REFERENCES**

Institution of Engineers, Australia (1987), Australian Rainfall and Runoff, A Guide to Flood Estimation Stormwater Committee, Victoria (1999), Urban Stormwater Best Practice Environmental Management Guidelines. Pub. CSIRO

Engineers Australia, (2006), *Australian Runoff Quality. A Guide to Water Sensitive Urban Design* Melbourne Water (2005), *WSUD Engineering Procedures, Stormwater*. Pub. CSIRO

Lake Peninsula Estate (Bairnsdale Road, Paynesville), Surface Water Management Strategy and Functional Design of Wetland Retarding System (Final Report)



Neil M Craigie Pty Ltd and Pat Condina & Associates

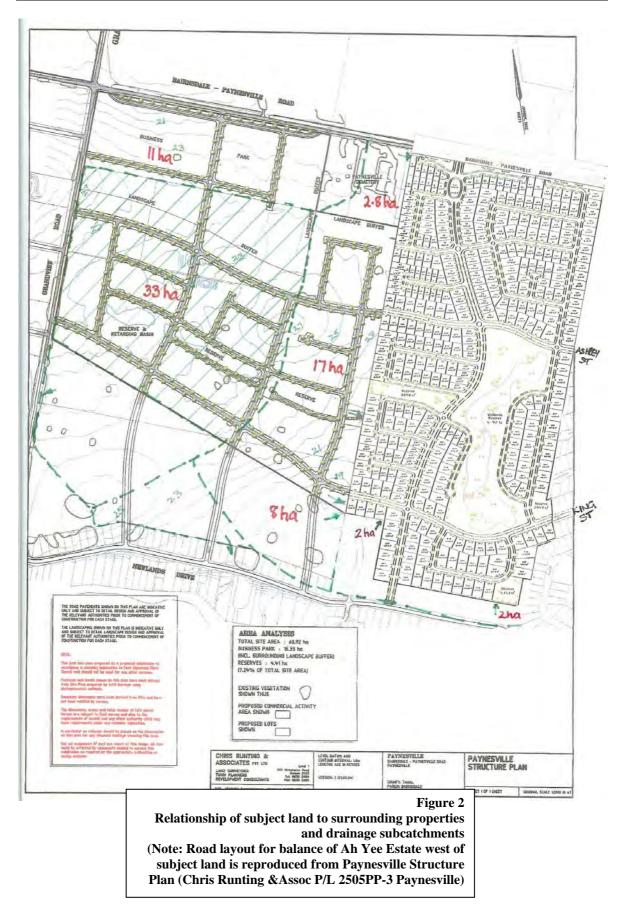




Photo 1 The northeast corner of the site showing swampy ground conditions on frontage to Bairnsdale-Paynesville Road and the nursery caused by failure of earlier developments to provide for natural surface drainage at this location. It is proposed to redirect all pipe drainage from the new development southwards to resolve this problem.



Photo 2 The existing Ashley Street construction and inlet to 1050 mm pipe drain at east boundary of site, looking northwards towards the nursery and Bairnsdale-Paynesville Road.



Photo 3 Looking southwesterly from near Ashley Street along the depression. The remnant mature trees are key site assets from landscape and environmental perspectives. Proposed wetland cells can easily be meandered around and between the trees without intruding near driplines. Dead trees are also important habitat and may be retained if suitably integrated in reserve areas, having regard to public safety. Alternatively any and all trees to be removed can be reused for habitat in wetland areas.



Photo 4 Looking northeasterly back towards the site where Photo 3 was taken with Ashley Street/Hakea Court lots in the background. A remnant ephemeral wetland area is marked by the sedge vegetation in the middle of the view. This wetland area is to be retained and enhanced (see also Figure 4).



Photo 5 The existing dam in the middle of the depression will be integrated with the proposed wetland system. The exposed soil profiles and muddy water reveal the dispersive nature of the subsoils. All water bodies will need to be fully covered by suitable depth of topsoil to mitigate subsoil dispersion into the water column.



Photo 6 Looking southerly from the middle of the depression towards King Street. There are no environmental impediments to construction of the proposed wetland system which will effectively manage water quality and downstream flows whilst providing a key landscape, recreational and environmental feature within the new residential estate.

Lake Peninsula Estate (Bairnsdale Road, Paynesville), Surface Water Management Strategy and Functional Design of Wetland Retarding System (Final Report)



Photo 7 Looking easterly across the existing dam to King Street. Significant trees on the waters edge are to be protected although the dam is to be removed.

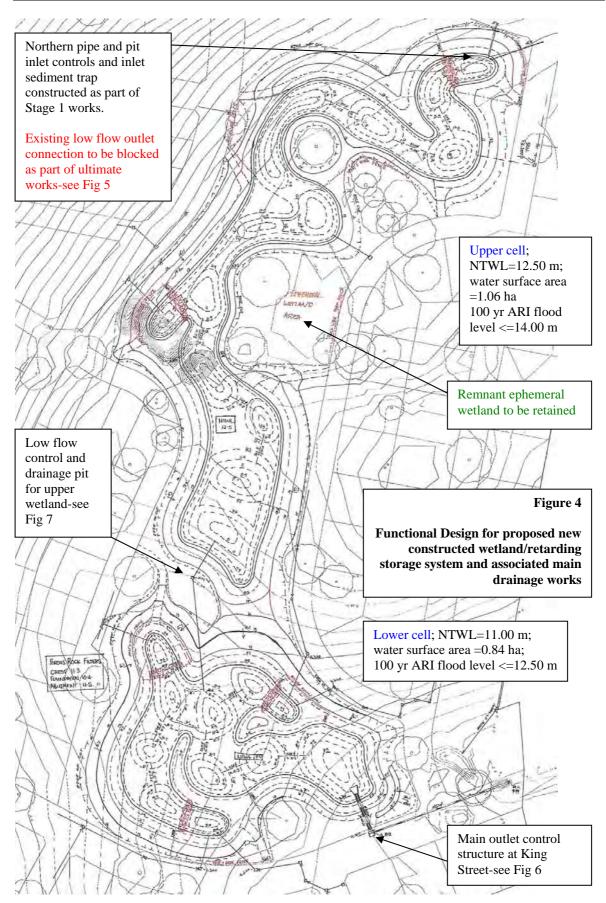


Photo 8 Looking easterly along King Street with the existing inlet structure to the drainage pipeline .

Lake Peninsula Estate (Bairnsdale Road, Paynesville), Surface Water Management Strategy and Functional Design of Wetland Retarding System (Final Report)



Lake Peninsula Estate (Bairnsdale Road, Paynesville), Surface Water Management Strategy and Functional Design of Wetland Retarding System (Final Report)



Lake Peninsula Estate (Bairnsdale Road, Paynesville), Surface Water Management Strategy and Functional Design of Wetland Retarding System (Final Report)

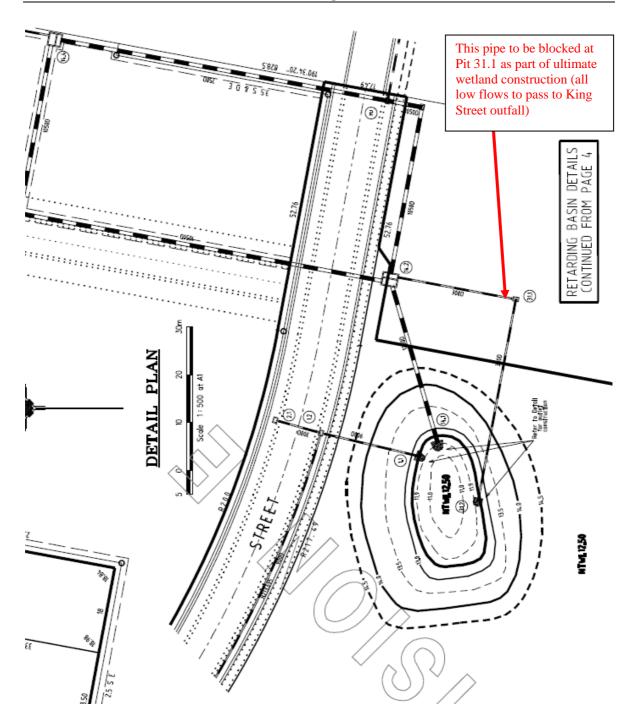
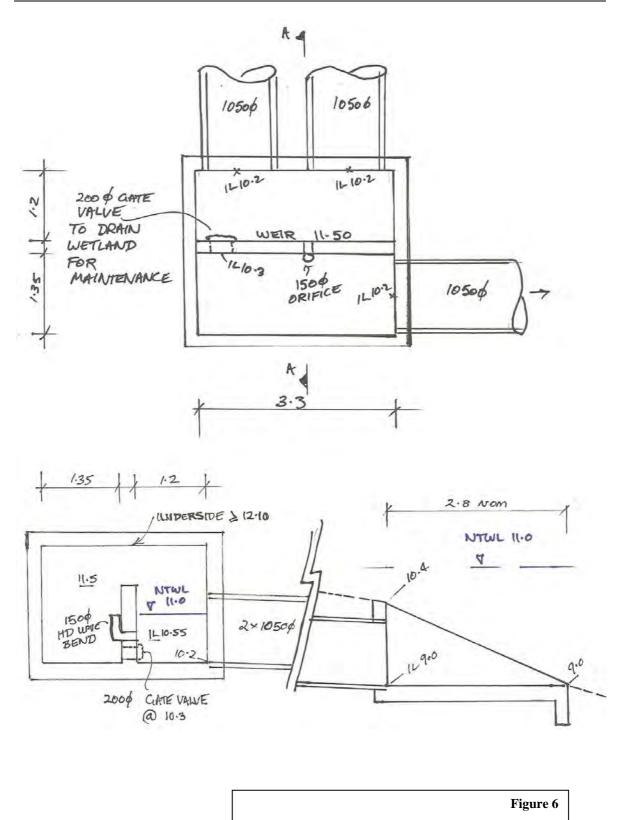


Figure 5

Pipe and pit controls and initial sediment trap at northern (Ashley Street) inlet to the wetland. (constructed as part of Stage 1 works-refer Watsons Dwg's 35531/1R, Rev E, 4 Mar 08)

Lake Peninsula Estate (Bairnsdale Road, Paynesville), Surface Water Management Strategy and Functional Design of Wetland Retarding System (Final Report)



Functional Design for proposed main outlet control structure from lower wetland at King Street

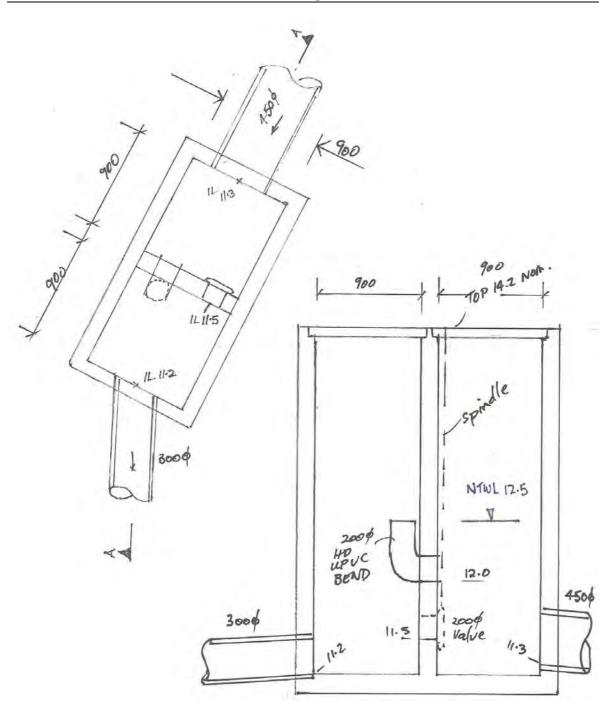
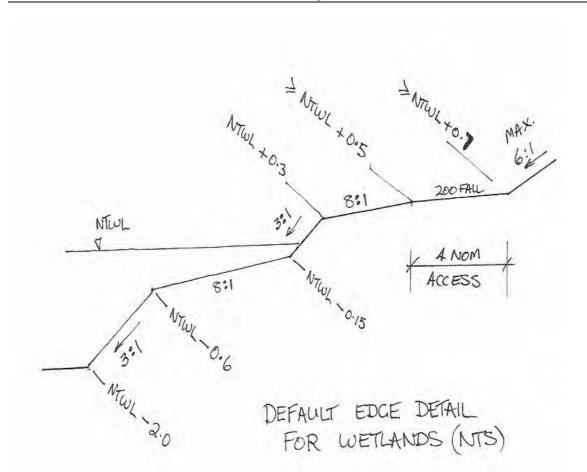


Figure 7

Functional Design for proposed main outlet control structure from upper wetland to lower wetland



Notes:

- 1. bathymetric detail varies below NTWL-0.60 m to suit deep pools, and between NTWL-0.15 and NTWL-0.6 to accommodate shallow berms at NTWL-0.30 m-refer to layout plans.
- 2. detail above ephemeral zone (>NTWL+0.5 m) may vary to suit access requirements and landscape design.

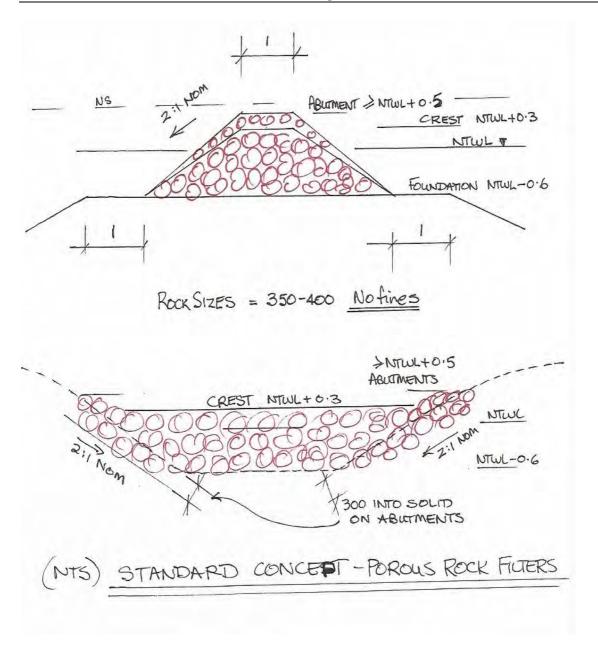
©

Figure 8

Standard Concept Drawing

DEFAULT EDGE DETAIL FOR WETLANDS

Neil M Craigie Pty Ltd 2005



Lake Peninsula Estate (Bairnsdale Road, Paynesville), Surface Water Management Strategy and Functional Design of Wetland Retarding System (Final Report)

Note: It is essential that the rock size recommendations of 350-400 mm uniform size with no fines be followed. The use of graded rockfill will not achieve the required performance as the filter wall will block and raise upstream levels.

©

Figure 9

Standard Concept Drawing

POROUS ROCK FILTERS

Neil M Craigie Pty Ltd 2005

APPENDIX 1 AQUATIC PLANTINGS

A range of aquatic plant species could naturally colonise the wetlands and on-line ponds once they are filled, however it is essential to accelerate this process (and ensure colonisation by desirable species) by extensive plantings of aquatic plants, and preferably those known to be locally indigenous to the area.

Healthy populations of water plants are essential for effective stormwater treatment. Apart from their value as aquatic habitat they:

- Take up nutrients from stormwater that would otherwise be available for algal productivity;
- Can be a visually attractive and interesting part of the aquatic system;
- Give the system a more natural, less artificial appearance;
- Protect the edges from erosion, and make level fluctuations less obvious;
- Provide food, shade and shelter to invertebrates and fish.

Of course there is always the possibility that one or more species could grow in nuisance proportions (in particular some species of Typha, Cyperus and Paspalum) but attention to monitoring and maintenance, and early control will prevent such conditions from arising. Depending on the rates of growth of aquatic species some harvesting may be required in future.

Wetland plantings should be selected primarily for water treatment purposes, but other species should also be included for the purpose of increasing ecosystem diversity and landscape interest. Table A.1 shows the preferred depth zones of a range of water plants and gives an indication of planting density. In preparing the list reference has been made to Melbourne Water's Guidelines for Constructed Wetland Systems (2003). The main purpose of the plants is their ability to provide treatment to incoming stormwater; therefore perhaps 4 - 6 structural species are planted in large numbers while a further 10 or so species are planted to increase species, habitat and visual diversity. Preference will be given to plants naturally occurring locally. The densities suggested form an initial minimum. It is expected that over the first two years, there will be natural spread to achieve an optimum density. Some further in-fill planting may then be required. The establishment of submerged marsh may require several introductions of plant parts of Chara, Nitella and Potamogeton species.

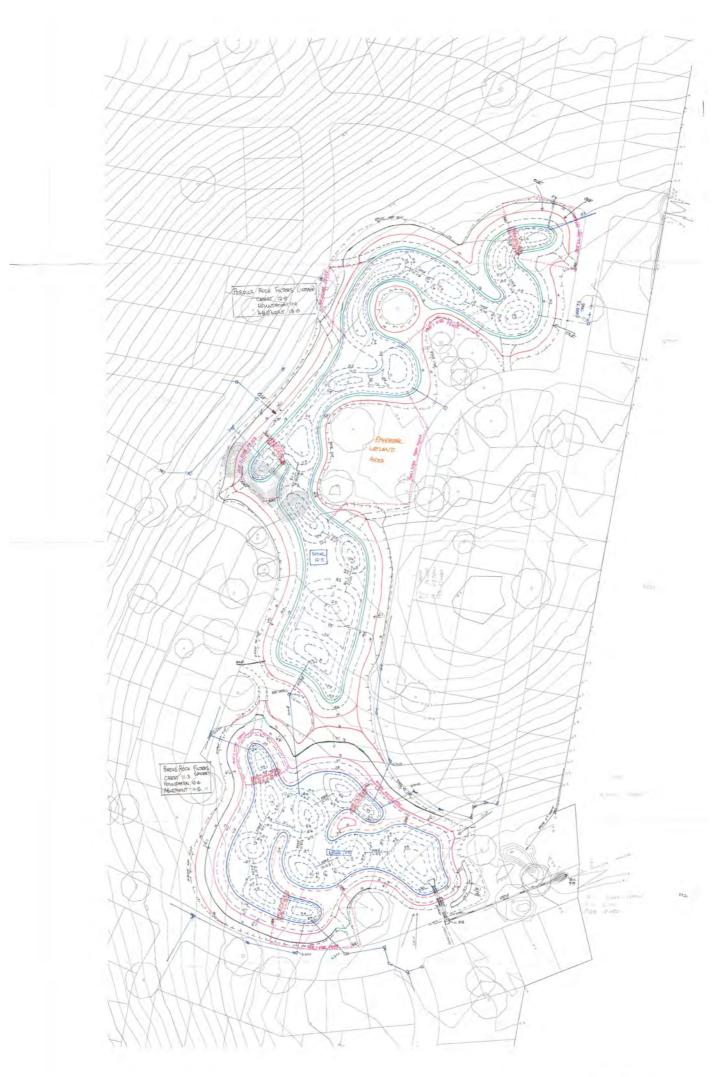
It is suggest that the species marked in bold form about 80% of the total number of species for that zone, with approximately equal numbers of each; with a selection of about 10 or so other species comprising about 20% of the zone total, and again each species being about equally represented. An experienced aquatic plant contractor will mix the overall plants in each zone to obtain a pleasing landscape effect and furthermore will, even within a zone, be aware of plant depth preference and plant accordingly.

Lake Peninsula Estate (Bairnsdale Road, Paynesville), Surface Water Management Strategy and Functional Design of Wetland Retarding System (Final Report)

Schedule	Table A1 of recommended wetland plants	Paynesville Waterbodies subject to availability and inclusion of local aquatics	ly occurring native
Zone Code	Zone Description	Recommended Plants	Plants/ Square Metre
Dryland	+0.3m above NTWL to 1 year ARI flood level. Riparian zone native vegetation subject to infrequent ephemeral inundation SHADE ESTABLISHMENT IS A CRITICAL CONSIDERATION FOR SELECTION AND DENSITY OF PLANTINGS ESPECIALLY AROUND WATER EDGES.	The following could form basis of Dryland plantings subject to preferential selection of locally indigenous species: Eucalyptus ovata Acacia melanoxylon Austrodanthonia sp. Melaleuca ericifolia Melaleuca squarrosa Goodenia ovata Lomandra longifolia Lomandra filformis Microlaena stipoides Poa labillardieri	As recommended by landscape architects.
1	Normal Top Water Level to +0.3 m above NTWL Ephemeral Marsh Grasses of moist soils and aquatic native vegetation subject to occasional inundation during high flows or capillary rise from edges of water body. SHADE ESTABLISHMENT IS A CRITICAL CONSIDERATION FOR SELECTION AND DENSITY OF PLANTINGS ESPECIALLY AROUND WATER EDGES.	Melaleuca ericifolia Poa labillardierei Carex brevicaulis Carex appressa Carex fascicularis Cyperus lucidus Ghania radula Gahnia sieberiana Juncus pallidus Juncus amabilis Juncus sarophorus Isolepsis inundata Lomandra longifolia Lepidosperma laterale	6 Species in bold forming 80% of zone total

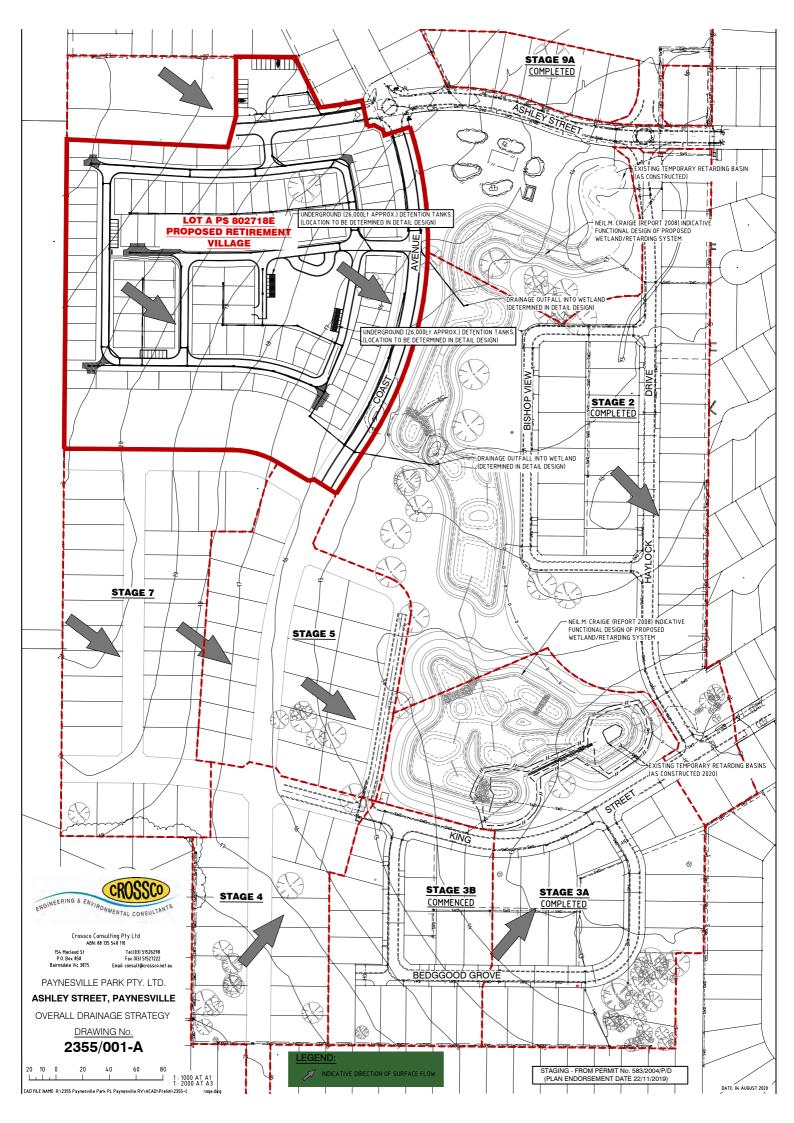
Lake Peninsula Estate (Bairnsdale Road, Paynesville), Surface Water Management Strategy and Functional Design of Wetland Retarding System (Final Report)

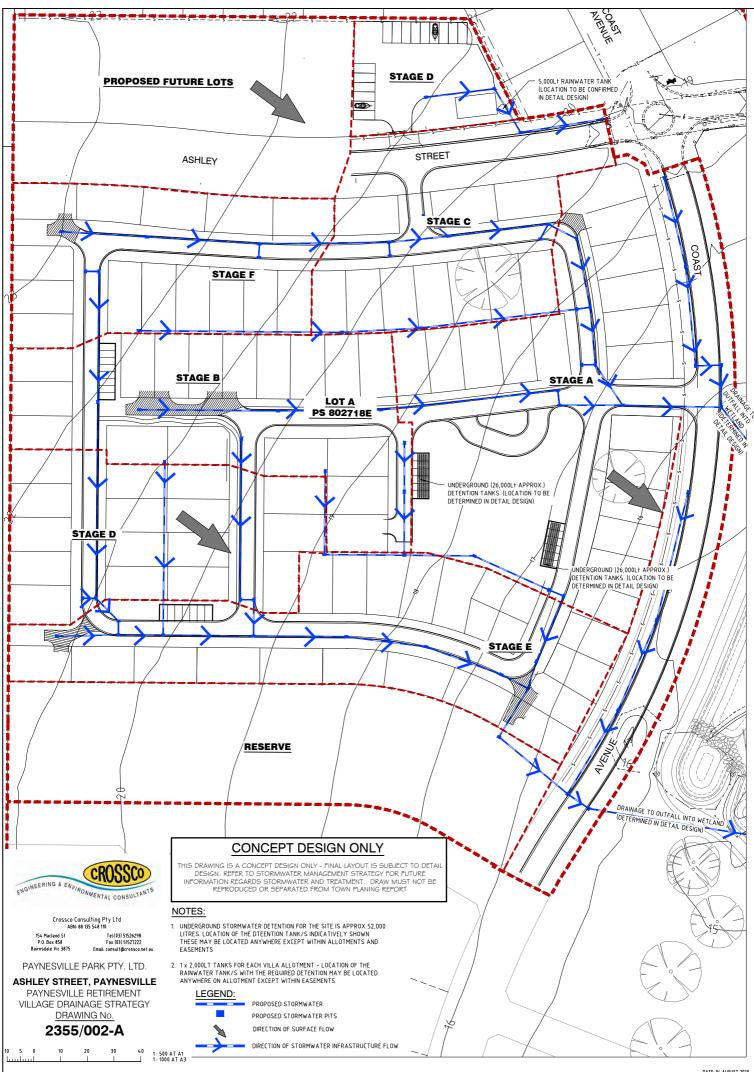
	e of recommended wetland plants	aquatics	• 0
Zone Code	Zone Description	Recommended Plants	Plants/ Square Metre
2	Depth from 0 to -0.2m. Shallow Marsh. Experiences	Bulboschoenus caldwellii Baumea arthrophylla	6 Species in bold
	frequent drying	Baumea articulata	forming 80% of
	1V:1:10 to 1V:8H	Bulboschoenus medianus	zone total. Subjec
	Width $\sim 2 \text{ m}$	Carex appressa	to inclusion of an
	width ~ 2 m	Carex appressa Carex fascicularis	
			locally occring
		Carex tereticaulis	species
		Cladium procerum	
		Crassula helmsii	
		Eleocharis acuta	
		Isolepsis inundata	
		Isolepsis nodosa	
		Juncus amabilis	
		Juncus planifolius	
		Juncus holoschoenus	
		Juncus procerus	
		Marsilea hirsuta	
		Montia australisica	
		Myriophyllum simulans	
		Mimulus repens	
		Triglochin striata	
		Villarsia reniformis	
3	Depth from -0.2 to -0.4.m	Eleocharis sphacelata	4
	Marsh/Deep Marsh	Schoenoplectus tabernaemontani	Species in bold
	(emergent). Shrinks in	Schoenoplectus pungens	forming 80% of
	extended dry period but does	Triglochin procera	zone total
	not dry up completely	Myriophyllum simulans	
	1V:3H	Ottelia ovalifolia	
		Vallisneria americana	
4	Depth from 0.4 m to 0.6 m.	Chara sp	2
	Deep Marsh (submerged)	Nitella sp.	Equal numbers of
	· · · · · · · · · · · · · · · · · · ·	Potamogeton ochreatus	each
		Triglochin procera	
5	Depth from 0.6 to 1.1 m	Potamogeton ochreatus	1
5	Submerged macrophyte zone		1
6	Depth >1.0m	No plantings recommended. The	0
	Open Water	submerged marsh species will colonise	
	- r - · · · · · · · · · · · · · · · · · ·	these zones	





Appendix 2 – Crossco Concept Stormwater Layout Drawing







Appendix 3 – PS 729135M

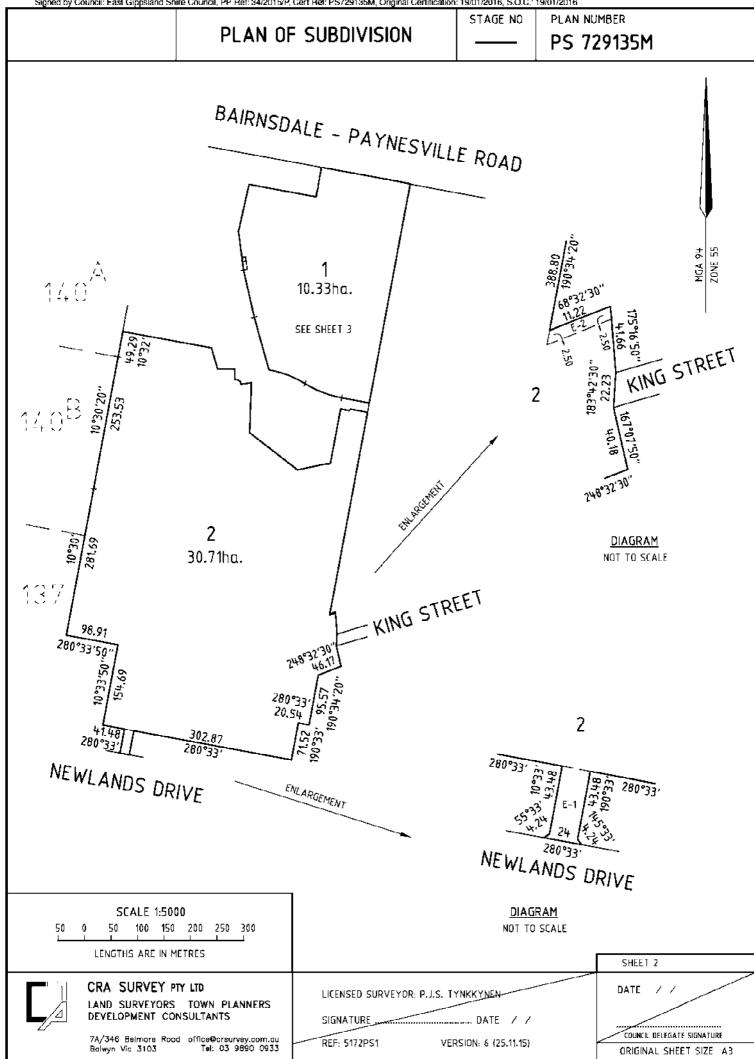
Delivered by LANDATA®. Land Victoria timestamp 08/07/2016 14:41 Page 1 of 4

Signed by	y Council: East Gippsland Shire Council	, PP Ref: 34/2015/		- -				
	PLAN OF SUB		STAGE I	NO	LRS USE ONLY	PLAN NUMBER		
	PLAN UF SUD	UVISIU	• <u> </u>	-	EDITION 1	PS 729135M		
LOCATION OF LAND				COUNCIL CERTIFICATION				
PARISH: BAIRNSDALE			COUNCI	COUNCIL NAME: EAST GIPPSLAND SHIRE REF:				
TOWNSHIP: -			th THI	(1) THIS PLAN IS CERTIFIED UNDER SECTION 6 OF THE SUBDIVISION ACT 1988.				
CROWN AL	SECTION: - CROWN ALLOTMENT: 141 (PART), 141A & 141B (PART) CROWN PORTION: -			 (2) THIS PLAN IS CERTIFIED UNDER SEC. 11(7) OF THE SUBDIVISION ACT 1988. DATE OF ORIGINAL CERTIFICATION UNDER SECTION 6 				
LAST PLAN TITLE REFE	NREF: PS 609841H LOT B		1-1	 (3) THIS IS A STATEMENT OF COMPLIANCE ISSUED UNDER SECTION 21 OF THE SUBDIVISION ACT 1988 				
POSTAL AU			PUBLIC	PUBLIC OPEN SPACE:				
T VUTTE TO	PAYNESVILLE 3880			(i) A REQUIREMENT FOR PUBLIC OPEN SPACE UNDER SECTION 18 OF THE SUBDIVISION ACT 1988 HAS / HAS NOT BEEN MADE				
OF APPROX.				(ii) THE REQUIREMENT HAS / HAS NOT BEEN SATISFIED				
of land in	PLAN ZONE 55			(iii) THE REQUIREMENT IS TO BE SATISFIED IN STAGE:				
				(iv) THE REQUIREMENT HAS BEEN SATISFIED FOR:				
VF	STING OF ROADS OR RE	SERVES	COUNCIL	l seal	SIGNATURE	PRINT NAME		
IDENTIFIER				1				
						1(7) OF THE SUBDIVISION ACT 1988		
RESERVE N	o.1 AUSNET ELECTRI	CITY SERVICES		L DELEG L SÆAL	ATESIGNATURE	PRINT NAME		
			DATE		1			
			NOTATIONS					
DEPTH L DOES NOT	LIMITATION: F APPLY							
THIS IS	A SPEAR PLAN							
STAGIN	G:							
THIS IS N	OT A STAGED SUBDIVISION							
	5 PERMIT NO:							
SURVEY THIS PLA	: N IS BASED ON A PARTIAL SURVI	EY -RESERVE 1	ONLY					
	VEY HAS BEEN CONNECTED TO PE AIMED SURVEY AREA NUMBER:	RMANENT MAR	KS:					
	AIRED SONVET AREA NOTBER.							
	E	ASEMENT	INFORMATION			LRS USE ONLY		
LEGEND:	A - APPURTENANT EASEMENT	E – ENCUMBE	RING EASEMENT R -	ENCUMB	ERING EASEMENT (ROAD)			
EASEMENT		WIDTH				STATEMENT OF COMPLIANCE EXEMPTION STATEMENT		
REFERENCE	PURPOSE	(METRES)	origin	LAND) BENEFITED/IN FAVOUR OF			
E-1	WAY, DRAINAGE & SEWERAGE	SEE PLAN	LP 2146969F	LAN) IN LP 214696F			
E-2	SEWERAGE		PS 3136065		IN PS 3136065	DATE 21/03/2016		
E-1	SEWERAGE	SEE PLAN	THIS PLAN		GIPPSLAND REGION			
E-2	SEWERAGE	2.50	THIS PLAN	EAST	ER CORPORATION	PLAN REGISTERED		
E-3	POWERLINE	SEE PLAN	THIS PLAN		ER CORPORATION NET ELECTRICITY SERVICES PT			
			SECTION 88					
		1 1	ELECTRICITY INDUSTRY ACT 2000			ASSISTANT REGISTRAR OF TITLES		
			1			SHEET 1 OF 2 SHEETS		
 ' `)	CRA SURVEY PTY LTD		LICENSED SURV	VEYOR: P	.J.S. TYNKKYNEN	DATE / /		
LAND SURVEYORS TOWN PLANNERS								
	7A/346 Belmore Rood office@	crsurvey.com.au	SIGNATURE: DI	IGT ALC 1		COUNCIL DELEGATE SIGNATURE		
Balwyn Vic 3103 Tel: 03 9890 0933			REF: 5172PS1		VERSION: 6 (25,11,15)	ORIGINAL SHEET SIZE A3		

Signed by: Paavo Jukka Tynkkynen (CRA Survey Pty Ltd) Surveyor's Plan Version (6 (25.11.15)) SPEAR Ref: 5067329E 11/01/2016

Delivered by LANDATA®. Land Victoria timestamp 08/07/2016 14:41 Page 2 of 4

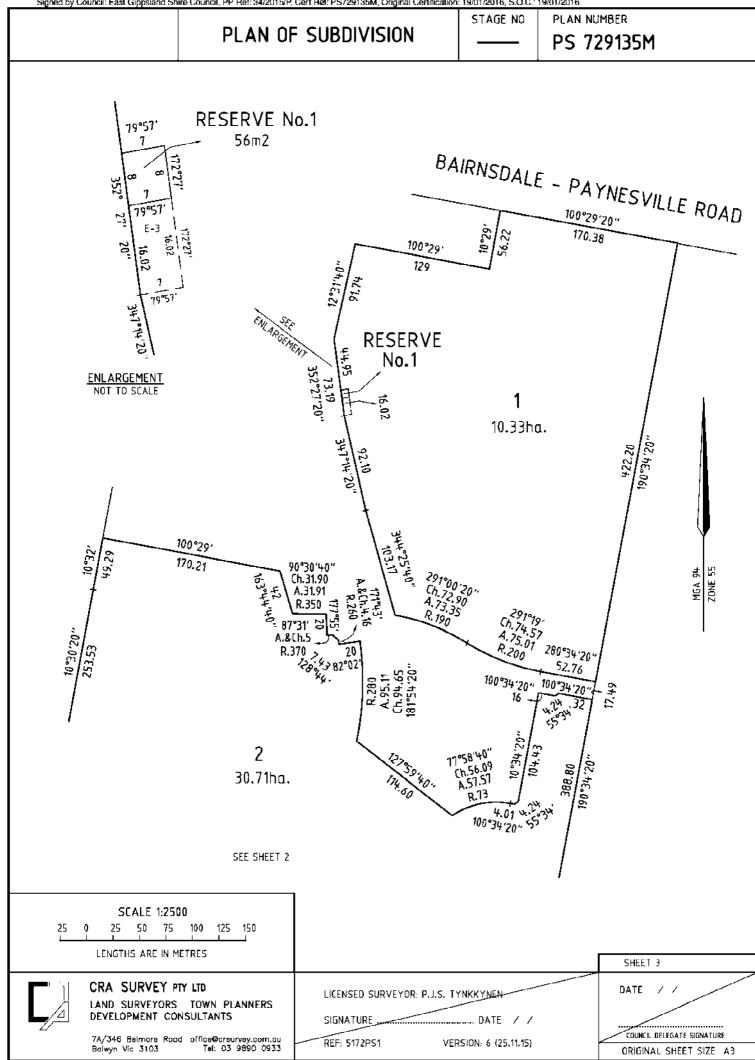
Signed by Council: East Gippsland Shire Council, PP Ref: 34/2015/P, Cert Ref: PS729135M, Original Certification: 19/01/2016, S.O.C.: 19/01/2016



Signed by: Paavo Jukka Tynkkynen (CRA Survey Ply Ltd) Surveyor's Plan Version (6 (25.11.15)) SPEAR Ref: S067329E 11/01/2016

Delivered by LANDATA®. Land Victoria timestamp 08/07/2016 14:41 Page 3 of 4

Signed by Council: East Gippsland Shire Council, PP Ref: 34/2015/P, Cert Ref: PS729135M, Original Certification: 19/01/2016, S.O.C.: 19/01/2016



Signed by: Paavo Jukka Tynkkynen (CRA Survey Pty Ltd) Surveyor's Plan Version (6 (25.11.15)) SPEAR Ref: S067329E 11/01/2016



LICENSED SURVEYORS & TOWN PLANNERS

152 Ma

PO Box 722, Bairnsdale, VIC 3875

> P: 5152 5011 F: 5152 5705

SOCIAL IMPACT ASSESSMENT

Use and Development of a Retirement Village

91 Coast Avenue, Paynesville

Prepared by Crowther & Sadler Pty. Ltd. September 2020





1. **Population Planning**

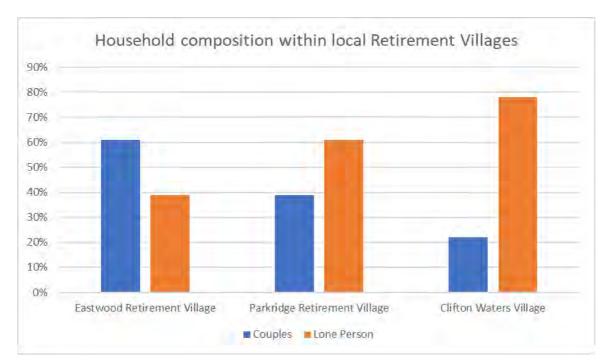
The proposed Retirement Village will be targeted towards residents over the age of 55. In the 2016 Census, people aged 55 or more comprised 56.7% of the total population of Paynesville. This is higher than the proportion found in the broader East Gippsland LGA where the percentage of people aged 55 or more was 44.5%, and higher again than the Victorian percentage of 27%. The median age for Paynesville was 59, substantially higher than the Victorian (37) or Australian (38) median age.

One contributing factor to this larger representation is presumed to be linked to the Aged Care facilities which operate in Paynesville and provide accommodation for 100 persons. For the purpose of this statistical analysis those persons have not been excluded.

In determining the likely household composition, we initially reviewed the existing conditions at three Retirement Villages within a 20 kilometres radius of the subject land, being:

- i. Parkridge Retirement Village at 5 Canal Road, Paynesville
- ii. Eastwood Retirement Village at 20 Evergreen Way, Eastwood
- iii. Clifton Waters Retirement Village at 3 Douglas Drive, Wy Yung

The following chart represents the mix in household composition across the three villages, with no clear statistical trends discernible. For example, the ratio of couples to lone person households at Eastwood was directly the opposite of what occurs at Parkridge.



We then interrogated data from the 2016 Census to review the typical household type for Paynesville, as compared to the East Gippsland or Victorian data.

Statistical Area	Lone Person Households	Couples without children living at home	
Victoria	24.7% of households	36.5% of households	
East Gippsland	30.8% of households	51.8% of households	
Paynesville	34.0% of households	62.2% of households	

Source: idcommunity (www.forecast.id.com.au/east-gippsland)

Looking specifically at the 'Older' cohort (aged 65+, we understand they represent 37.5% of the Paynesville population (2,048 people).

Household type for the 'Older' cohort (aged 65+) comprised the following:

Statistical Area	Lone Person Households	Couples without children living at home	
East Gippsland	2,760 (14.4% of households)	3,229 (16.9 % of households)	
Paynesville	441 (17% of households)	658 (25.3% of households)	

Source: idcommunity (www.forecast.id.com.au/east-gippsland)

Based on this statistic, we understand the population split between the various household types identified within 'Older' cohort is represented as follows:

Lone person – 441 persons (21.5%)

Couples without children at home – 1313 persons (two per household) (64.1%)

Other (Residential Aged Care Facility or unspecified – 291 persons (14.3%)

For the purposes of this exercise we have excluded consideration of the 'other' type of dwelling composition, and we have focussed on the lone person or couples without children dwelling type, which represent 25.1% and 74.9% respectively (simplified to a ratio of 3:1).

We have then applied this 3:1 ratio to the Retirement Village proposal which seeks to erect 93 villas. Based on the household composition data we anticipate the following occupancy:

70 couple households with no children (140 people)

23 lone person households

Total population = 163 people

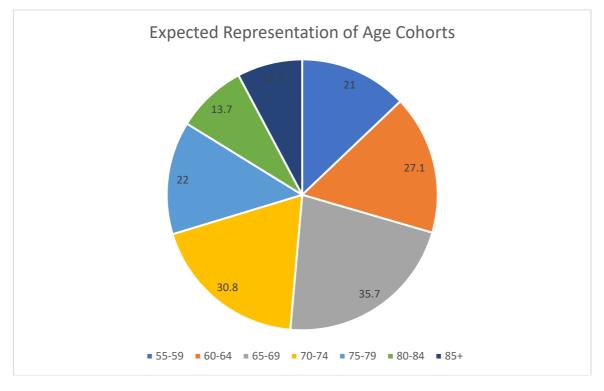
We note the subject land has previously been approved to contain 50 residential allotments. Based on the predicted rate for Paynesville of 2.06 persons per dwelling, the approved residential subdivision would result in a population of 103 people. The proposed Residential Village will therefore result in an increase in population of 60 people.

To determine the likely age spread of residents across the Village community, two sources of data have been reviewed, with each indicating a different population above the age of 55. This was considered an appropriate validity measure given well documented problems with the 2016 Census. Data from ABS QuickStats is shown in blue, with idcommunity data shown in orange. The average of the two data sets is shown in yellow.

Cohort	ABS QuickStats	%	Applied to RV	idcommunity	%	Applied to RV	Mean
55-59	294	12.4	20.2	449	13.4	21.8	21.0
60-64	375	15.9	25.9	577	17.4	28.4	27.1
65-69	515	21.7	35.4	738	22.1	36.0	35.7
70-74	449	18.9	30.8	628	18.9	30.8	30.8
75-79	328	13.9	22.7	430	13.0	21.2	22.0
80-84	205	8.6	14.0	272	8.2	13.4	13.7
85+	205	8.6	14.0	231	7.0	11.4	12.7
Total	2,371		163.0	3,325		163.0	163.0

Sources: ABS QuickStats (<u>www.abs.gov.au</u>) idcommunity (<u>www.forecast.id.com.au/east-gippsland</u>)

The following chart represents the likely age spread of residents within the Village.



The projected total population of 163 people equates to a density of 28.33 per hectare.

2. Building Social Capital

Each of the proposed villas has a strong sense of address to the internal road network. This provides opportunities for active and passive surveillance, whilst also ensuring each villa may establish its own identity.

Communal facilities within the Village will promote interaction amongst residents, with opportunities for social engagement across a range of facilities. The Community Centre provides the focal point for interaction, and is centrally located with the greatest distance from any villa being 170 metres to Villa No. 1 in the north-west corner of the site.

The Community Centre design has been carefully considered to provide multiple opportunities for interaction in a range of settings. Unlike a large communal hall with one large space, the Clubhouse could accommodate a range of social activities all being undertaken at the same time without interruption to other uses. The Pool, Gymnasium, Billiards Room and Multi Purpose room could each be in use whilst one large group or two smaller groups utilised the main gathering space (Meals and Lounge area).

The spacious grounds surrounding the Community Centre will be landscaped in a manner that will facilitate numerous 'break out' spaces, with hard and soft landscaped element assisting to achieve the sense of a series of outdoor rooms, as opposed to one large outdoor space.

A number of pocket parks are situated to the west and south-west of the Community Centre, providing a transition from the Community Centre grounds towards the large public reserve on the eastern side of Coast Avenue, and proposed Reserve area to the south.

The proposed Village has been carefully designed to provide a range of opportunities for interaction that will cater to the diverse needs of the Village community.

In addition to the opportunities for public realm interaction within the Village, there are a range of experiences available within Paynesville that residents will be able to enjoy. Recent investment by Council in the foreshore environments and Esplanade precinct have significantly improved the amenity of this area, which now provides multiple opportunities for passive recreation and enjoyment. Walkability within Paynesville has been enhanced by recent extensions of the footpath network, together with walking trails adjacent to Lake King, Newlands Arm Backwater and the Point Fullarton wetlands.

Significant investment in the public realm within the precinct which includes the subject land has been foreshadowed by Council's recent adoption of the Paynesville Growth Area Structure Plan, which anticipates a network of pedestrian trails and public spaces delivering multiple opportunities for passive and active enjoyment. The subject land will benefit from these improvements.

3. Health and wellbeing

Retirement Villages catering to over 55s provide individuals with a sense of belonging, reducing social isolation by providing an environment where residents feel part of a like-minded community. Research undertaken by the Australia Institute indicates the importance of inclusion is magnified for this older demographic, where the incidence of loneliness is increasing to an extent that 3 in 10 people will experience loneliness at some time. Living alone is the greatest risk factor for loneliness, with people living in lone person households twice as likely to experience loneliness, with men consistently lonelier than women (Baker, D., *All the lonely people: Loneliness in Australia, 2001-2009, The Australia Institute*, Institute Paper No. 9, June 2012).

Retirement villages provide a positive response to these risks, supporting the physical and emotional health and wellbeing of residents through an environment of social interaction and inclusiveness (Australian Unity, *Social benefits of retirement communities*, December 2013).

Residents within the proposed Residential Village will have the opportunity to engage in wide range of activities, which we expect will include, but not be limited to the following:

- Art classes
- Billiards
- Bingo
- Board games
- Card games
- Carpet bowls
- Christian fellowship
- Coffee mornings with guest speakers from a range of backgrounds, with examples including First Aid, Diabetes, Driver Education
- Community workshop
- Computer training
- Craft group
- Darts
- Dog socialisation group
- Fishing Group
- Footy tipping
- Friendship mornings
- Gardening club
- Gymnasium
- Lawn Bowls
- Library
- Line dancing

- Movie nights
- Personal Training
- Putting Green
- Social Club for external outings to community or cultural events outside the Village
- Table Tennis
- Tai Chi
- Walking group
- Wanderers Group (Caravan Club)
- Water Aerobics

The intention of the proposed Retirement Village is not for residents to be isolated from external interaction, rather it seeks to ensure residents remain engaged with the external community. Communities where Retirement Villages have established have found that residents prove an additional source of volunteer hours, providing crucial support to community groups.

It is expected that residents within the proposed Retirement Village will have the opportunity to engage with the following organisations should they desire:

- Anglican, Catholic and United Church communities
- East Gippsland Historical Society
- Freemasons
- Friends of the Gippsland Lakes
- Gippsland Lakes Yacht Club
- Local primary school
- Meals on wheels
- Opportunity Shops
- Paynesville Bowling Club
- Paynesville Bridge Club
- Paynesville Coastguard
- Paynesville Community Craft Centre
- Paynesville Country Women's Association
- Paynesville Football Club
- Paynesville Friends of Red Cross
- Paynesville Golf and Bowls Club
- Paynesville Lions Club
- Paynesville Maritime Museum
- Paynesville Men's Shed
- Paynesville Motor Cruiser Club
- Paynesville Neighbourhood Centre
- Paynesville RSL

Page 7

- Paynesville Tennis Club
- Probus Club of Paynesville
- Rotary Club of Mitchell River
- State Emergency Service Paynesville Branch
- U3A

To complement the operation of the Village, a Residents Committee will be established. The Residents Committee will be formed by a group of residents, elected by their fellow residents, to represent and protect the interests of all residents of the Village. The role of the committee is to foster community spirit and encourage compliance with village rules and policies, and to welcome new residents to the Village. The committee will promote good relations in the village to enhance the experience of residents.

The Committee will be run pursuant to the Model Rules for an Incorporated Association in accordance with Part 3 of the *Associated Incorporations Reform Regulations 2012.* The Model Rules have been established by Consumer Affairs Victoria under the *Associations Incorporations Reform Act 2012.* These instruments provide clear direction on opportunities for participatory decision making and dispute resolution.

The Residents Committee will provide multiple forms of communication to residents of upcoming activities and events which are likely to include a monthly newsletter, calendar of events and information stations both internal and external to the community centre.

4. Service access

As a guide in calculating the capacity of the Community Centre we have relied upon the formula for maximum patron capacity established by the Victorian Commission for Gambling and Liquor Regulation which prescribes a ratio of one person per 0.75m².

Based on this ratio the large Lounge and Meals space to the east of the facility could accommodate 109 people. The Multi Purpose Room to the south of the building has capacity for 18 people. These two spaces combined could accommodate 127 people, which falls short of the expected population for the Village.

Anecdotal evidence from other over 55s communities indicate it is extremely unlikely that any event would have 100% attendance from all residents of the Village. On that basis the scale of the proposed Community Centre is considered more than appropriate for the scale of the community proposed.

The Multi-Purpose Room may also be made available for use by visiting allied health or personal care professionals. In other Villages these areas are typically used by hairdressers, podiatrists, audiologists conducting hearing tests, pathology collection, dieticians, massage therapists and district nurses. It is noted that these services are also able to be provided within individual resident's homes as an invited guest of the resident, as would occur elsewhere in a conventional residential context. Other personal care services available within the home include but are not limited to home help and meals on wheels.

Visitors to the facility seeking to utilise rooms within the Community Centre need only make contact with the Village Manager to arrange access. The Village Manager will coordinate booking of communal spaces should there be competing demand.

Vehicle movements within Retirement Villages are substantially less than those associated with conventional residential development. This is supported by the Traffic Impact Assessment prepared in support of the development which found vehicle movements per day associated with this style of use to be far less than would otherwise be expected in a standard residential context.

Traffic speeds within the development will be limited to 20 kilometres per hour, with the internal road network adjoined by pedestrian footpaths on at least one side. This strong pedestrian connectivity promotes walking, reducing reliance on vehicles.

As with the majority of communities within the Shire, Paynesville has very limited access to public transport. A public bus route runs between Paynesville and Bairnsdale at the following times:

<u>Monday to Friday</u>	
Departs Paynesville:	9.15am, 11.15am*, 1.45pm, 5.15pm*
Departs Bairnsdale:	10.15am, 12.00pm*, 2.35pm*, 4.35pm, 5.40pm*
<u>Saturday</u>	
Departs Paynesville:	9.30am
Departs Bairnsdale:	11.25am*

* Scheduled to connect with the VLine service at Bairnsdale Railway Station

The operator describes this service as a 'Dial a bus' service operating from a flexible route. The bus will pick up or drop off at any practical point in Paynesville where a request has been made at least 15 minutes prior to departure. There is also some flexibility with pick up or drop off in Bairnsdale, with regular stops including the Hospital, Railway Station and Main Street outside Coles Supermarket.

This public service will be complemented by additional transport services provided for Residents. Taxi vouchers will be made available for travel around Paynesville to key retail and service locations. As the village population grows, an appropriate sized bus will be purchased for the exclusive use of the Residents.

5. Key Stakeholders

To better understand the impact the proposal may have on service providers, emergency services and community groups a targeted program of stakeholder consultation has previously been undertaken, to better understand how the proposal will impact the following organisations:

- East Gippsland Senior Citizen Register
- Victoria Police Bairnsdale District
- Paynesville Men's Shed
- Paynesville Ambulance Service
- Gippsland Lakes Complete Health
- Gillicks Bus Lines (operator of Paynesville Bus Service)
- East Gippsland Shire Council Paynesville Library / Service Centre
- Paynesville Pharmacy
- Paynesville RSL
- State Emergency Service Bairnsdale Branch
- U3A Bairnsdale
- Paynesville Neighbourhood House
- Paynesville Medical Group

The majority of feedback from this consultation was extremely positive. The projected increase in growth within the ageing population of the precinct has been anticipated by all, with many services already gearing up to accommodate such growth. For those businesses with a commercial focus, the growth in the aged population associated with the proposed development was welcomed.

Issues worthy of further consideration were linked to the proposed built form of individual villas, with a desire to ensure accessibility for people with limited mobility, or to provide a functional entry for emergency services. These matters have all been addressed as part of the villa design process, and will maximise the ability for residents to age in place.

Appropriate transportation to assist residents in getting to where the services are was also a recurring theme. The proposed use of taxis vouchers and community bus service in conjunction with the public transport service will assist in meeting this need.

Robert Pringle

From:	Kate Young <kate@crowthersadler.com.au></kate@crowthersadler.com.au>
Sent:	Tuesday, 9 February 2021 4:52 PM
То:	Robert Pringle; Peter Rogasch; ROGASCH, Peter
Cc:	Tom Camp
Subject:	Paynesville Park Retirement Village - Bushfire Consideration
Attachments:	18741 Bushfire Assessment.pdf

EXTERNAL EMAIL: This email has originated from outside of the East Gippsland Shire Council network. Do not click links or open attachments unless you recognise the sender and know the content is safe. Contact ICT ServiceDesk if you are unsure.

Good afternoon Robert and Peter,

Re: Planning Application 349/2020/P Proposed Retirement Village 91 Coast Avenue, Paynesville

In preparation for our meeting tomorrow, please find attached a Bushfire Hazard Assessment we have prepared in support of the above mentioned Application.

I suspect the section of most interest to you both appears at Page 22, where we proposed bushfire mitigation strategies.

I look forward to discussing with you both tomorrow.

Regards,

KATE YOUNG Town Planner

rowther & Sadler pty Ltd

LICENSED SURVEYORS & TOWN PLANNERS

152 Macleod Street (PO Box 722) BAIRNSDALE VIC 3875 Ph: 5152 5011



LICENSED SURVEYORS & TOWN PLANNERS

152 Macleod St. PO Box 722, Bairnsdale, VIC 3875

> P: 5152 5011 F: 5152 5705

Bushfire Hazard Assessment

Proposed Retirement Village 91 Coast Avenue, Paynesville Reference – 18741

9 February 2021



Surveyors

MEMBER FIRM

1. Introduction

This report has been prepared to identify bushfire hazard and to provide a risk assessment relating to the proposal for a Retirement Village at 91 Coast Avenue, Paynesville.

The purpose of this report is to:

- Respond to State Planning Policy at Clause 13.02-1S relating to Bushfire Planning;
- Identify vegetation, topographic and climatic conditions that create a bushfire hazard;
- Provide an assessment of the bushfire hazard on the basis of landscape conditions, local conditions, neighbourhood conditions and conditions of the subject land; and
- Respond to the identified bushfire hazard, including proposed bushfire protection measures and demonstrate how the protection of human life has been prioritised.



Extract from BCN Design & Access Site Plan

2. Locality & Site Description

The subject land is formally described as Lot A on Plan of Subdivision 802718E and is 6.732ha in area, being a large parcel of land contained within the General Residential Zone.

The property has a relatively even landform, sloping very gently downwards in a south-easterly direction. The property comprises of pastural grasses and bracken, with two eucalyptus trees which have previously been approved for removal in accordance with Clause 52.17 relating to Native Vegetation, and are to be removed prior to development commencing on site.



Drone image looking west across the subject land, with the Newlands Arm Backwater shown in the distance (Source: Crossco Consulting)

The subject land forms part of an evolving residential precinct earmarked for further residential growth. Properties to the north, east and south of the subject land are included within the General Residential Zone. Land to the west is included in the Farming Zone (Schedule 1).



Zone Mapping, with subject land outlined in blue (Source: VicPlan)

Properties adjoining the subject land to the north are developed with existing . A Municipal Reserve for Recreation and Drainage is established to the immediate east, with established residential development extending further east. Land to the immediate south is progressively being developed for residential purposes in accordance with Planning Permit 583/2004/P, with established residential development further south.



Aerial view of subject land and surrounding precinct (Source: Google Earth)

Land to the west has been identified for future rezoning to residential purposes in accordance with the Paynesville Growth Area Structure Plan. For now these open, grassed paddocks are utilised for grazing associated with a broader agricultural holding extending further west towards Eagle Point. The owner of the adjoining farming property regularly maintains a strip of land adjoining the residentially zoned land to ensure the grass is managed in a low fuel condition.



Maintained strip of Grassland adjoining subject land (Date of photo: 8 February 2021)



Maintained strip of Grassland adjoining established residential properties (Date of photo: 8 February 2021)

There are some large eucalyptus trees adjoining roads and scattered throughout the wider landscape to the west, however the predominant classifiable vegetation surrounding the subject land is Grassland.



Looking south-east towards subject land from Paynesville Road (adjacent to Cemetery) (Date of photo: 8 February 2021)

3. State Planning Policy Assessment

Objective

Clause 13.02-1S of the Planning Policy Framework seeks 'to strengthen the resilience of settlements and communities to bushfire through risk-based planning that prioritizes the protection of human life'.

Policy Application

The Bushfire Planning Policy at Clause 13.02-1S is to be applied to all planning and decision making under the *Planning & Environment Act 1987* relating to land that is:

- Within a designated bushfire prone area;
- Subject to a Bushfire Management Overlay; or
- Proposed to be used or developed in a way that may create a bushfire hazard.

Whilst the subject land is not affected by the provisions of the Bushfire Management Overlay, the Policy does need to be considered for the proposed development as the site is identified as a designated bushfire prone area.



Extact from Bushfire Management Overlay mapping (Source: VicPlan)

4. Strategies

The following tables outline the various strategies to be implemented under the provisions of Clause 13.02-1S relating to Bushire Planning and provides responses specific to the proposal at hand.

Protection of Human Life	
Strategy	Response
Prioritising the protection of human life over all other Policy	The proposed development in this location is considered to ensure protection of human life.
Considerations.	 The subject land is excluded from Bushfire Management Overlay mapping.
	• The site is located within an existing residential precinct located just over one kilometre from the central business district of Paynesville.
	• The subject land and surrounding residentially zoned land is well managed and modified in nature. The landform is flat and does not promote hazardous fire runs.
	• Cleared agricultural land to the west is well maintained through regular grazing, together with slashing of a buffer strip adjoining the residential precinct to ensure appropriate management to a low fuel condition during fire season. On that basis it is not considered to provide a severe fire threat.
Directing population growth and development to low risk locations and ensuring the availability of, and safe access to, areas where human life can be better protected from the effects of bushfire.	The subject land is considered a low risk location given its 'in town' location and close proximity to the main township areas of Paynesville, Bairnsdale and Eagle Point and the surrounding conditions.
	Vehicle access from the subject land to the primary settlement area of Bairnsdale is provided via good quality bitumen sealed roads.
	The close proximity to the township area and good access enhances the protection of human life from the bushfire risk.
communities to bushfire through the consideration of bushfire	The development has been designed having regard for the needs of future development under Australian Standard AS3959.
risk in decision making at all stages of the planning process.	Given the designation of the subject land as a Bushfire Prone Area, a Bushfire Attack Level (BAL) will need to be established for each of the proposed villas.
	The development has been designed to ensure that each villa can achieve construction to a minimum BAL of 12.5 through mechanisms including slab on ground construction, safety glass, full roof sarking and ember guards.
	The installation of a 1.8m high Colorbond fence for the full length of the western boundary will have the effect of shielding the property from the fire threat to the west.

Bushfire Hazard Identification & Assessment	
Strategy	Response
Identify bushfire hazard and underta	ke appropriate risk assessment by:
Applying the best available science to identify vegetation, topographic and climatic	The Planning Application triggers consideration of the proposal under Clause 13.02-1S of the East Gippsland Planning Scheme.
conditions that create a bushfire hazard.	The need to consider the requirements of Australian Standard AS3959 arises from the subject land being within a Designated Bushfire Prone Area.
	The Application has therefore considered the methodology and controls of Australian Standard AS3959 as part of the bushfire assessment.
Considering the best available information about bushfire hazard including the map of designated bushfire prone areas prepared under Building Act 1993 or regulations made under that Act.	This report demonstrates that the development is able to meet the requirements of Table 2.4 of Australian Standard AS3959:2018.
Applying the Bushire Management Overlay to areas where the extent of vegetation can create an extreme bushfire hazard.	The subject land is not affected by the Bushfire Management Overlay. The nearest Bushfire Management Overlay affected area is approximately 1400m to the south-west.
	The exclusion of the site from the Bushfire Management Overlay highlights that the site is not considered to be at severe risk from bushfire.
Considering and assessing the bushfire hazard on the basis of:	Please refer to Section 6 of this Report.
-Landscape Conditions (Meaning conditions in the landscape within 20km (& potentially up to 75km) of a site).	
-Local Conditions (Meaning conditions in the area within approximately 1km of a site).	
-Neighbourhood conditions (Meaning conditions in the area within 400m of a site.	
-The site for the development.	
Consulting with emergency management agencies and the relevant fire authority early in the process to receive their recommendations and implement appropriate bushfire protection measures.	The Planning Application does not need to be formally referred to the Country Fire Authority. The Responsible Authority will need to be satisfied that the proposal adequately addresses Clause 13.02-1S.

Bushfire Hazard Identification & Assessment (continued)

Strategy

Response

Identify bushfire hazard and undertake appropriate risk assessment by:

Ensuring that strategic planning documents, planning scheme amendments, planning permit applications and development plan approvals properly assess bushfire risk and include appropriate bushfire protection measures.	This report demonstrates that the proposal has consideration and regard to bushfire risk. Appropriate bushfire mitigation measures will be achieved by adoption of appropriate construction techniques (including shielding) and the management of the adjoining Grassland to ensure appropriate separation from the fire hazard in accordance with Column A of Table 2.4 of AS3959:2018. In addition, the subject land is not exposed to any of the natural hazards identified at Section 3.1.4 of the Paynesville Growth Area Structure Plan.
Not approving development where a landowner or proponent has not satisfactorily demonstrated that the relevant policies have been addressed, performance measures satisfied or bushfire protection measures can be adequately implemented.	This report demonstrates that the proposal responds positively to the provisions of Clause 13.02-1S, and that appropriate bushfire protection measures can be implemented.

Settlement Planning	
Strategy	Response
Plan to strengthen the resilience of settle human life by:	ements and communities and prioritise protection of
Directing population growth and development to low risk locations, being those locations assessed as	The omission of the subject land from the Bushfire Management Overlay demonstrates that the subject land is not a high risk bushfire area.
having a radiant heat flux of less than 12.5 kilowatts/square metre under AS 3959-2018 Construction of Buildings in Bushfire-prone Areas (Standards Australia, 2018).	Vacant Grassland to the west of the subject land has been earmarked for residential growth within the Paynesville Growth Area Structure Plan, which is silent on the issue of bushfire, other than in respect to future landscaping of public spaces. This is considered to demonstrate that the strategic vision has determined there to be no substantial risk to human life and property.
	Residential development in this location is therefore considered appropriate and will not result in any adverse bushfire risk or risk to life and property.
	Whilst the preferred strategic outcome is documented, we acknowledge the current condition of the adjoining agricultural Grassland must form the basis of our considerations.
	The proposed development will be shielded from the fire hazard through a 1.8m high Colorbond fence along the length of the western boundary.

Settlement Planning (continued)	
Strategy	Response
Plan to strengthen the resilience of settle human life by:	ements and communities and prioritise protection of
Directing population growth and development to low risk locations, being those locations assessed as having a radiant heat flux of less than 12.5 kilowatts/square metre under AS 3959-2018.	Adjoining Grassland can continue to be managed to a low fuel condition, to ensure appropriate separation. Each of the proposed villas will be constructed to a minimum BAL-12.5 standard.
Ensuring the availability of, and safe access to, areas assesses as a BAL- Low rating under AS 3959-2018 Construction of Buildings in Bushfire- prone Areas (Standards Australia, 2018) where human life can be protected from the effects of bushfire.	The subject land is located within two kilometres of the main commercial centre of Paynesville, and a short drive from the regional centre of Bairnsdale, both of which provide safe refuge from bushfire. Access to both towns is facilitated by good quality sealed road networks.
Ensuring the bushfire risk to existing and future residents, property and community infrastructure will not increase as a result of future land use and development.	Bushfire risk will not increase as a result of the proposed development. The activation of the subject land from a vacant residential parcel to an integrated residential community will provide additional protection to existing and future development, as there will be ongoing assurance of management and continued maintenance of the land.
Achieving no net increase in risk to existing and future residents, property and community infrastructure, through the implementation of bushfire protection measures and where possible reducing bushfire risk overall.	There will be no net increase in risk resulting from the proposal, as appropriate bushfire protection measures will be implemented. Proposed villas within the Village will be required to construct to a minimum of BAL 12.5, which is easily achieved having regard for the method of construction proposed. The development has been designed in a manner which will ensure that future Villas will have direct and convenient access to either an existing or proposed road network.
Assessing and addressing the bushfire hazard posed to the settlement and the likely bushfire behavior it will produce at a landscape, settlement, local, neighbourhood and site scale including the potential for neighbourhood-scale destruction.	Although the site is not considered to be at high risk from bushfire, evident through the absence of the Bushfire Management Overlay, bushfire still requires consideration due to the Bushfire Prone Area designation. The main fire threat posed by the Grassland to the west will continue to be managed. Areas of excludable and/or modified vegetation will assist in interrupting long fuel runs, including the Bairnsdale Golf Club, and road reserves maintained as Primary Firebreak Roads maintained by the Paynesville Fire Brigade including Paynesville Road to the north, and travelling west to Grandview Road, Lake Victoria Road, Forge Creek Road, Romawi Road, Lower Goon Nure Road and Humphreys Lane. This reduces the potential for neighbourhood-scale destruction.

Settlement Planning (continued)	
Strategy	Response
Plan to strengthen the resilience of settle human life by:	ements and communities and prioritise protection of
Assessing and addressing the bushfire hazard posed to the settlement and the likely bushfire behavior it will produce at a landscape, settlement, local, neighbourhood and site scale including the potential for neighbourhood-scale destruction.	Further information on the bushfire behaviour at a landscape, local, neighbourhood and site level is provided at section 6 of this Report.
Assessing alternative low risk locations for settlement growth on a regional, municipal, settlement, local and neighbourhood basis.	Settlement planning anticipates residential growth to the west and north-west of the subject land, consistent with the Paynesville Growth Area Structure Plan. There are no real other opportunities for settlement growth in Paynesville having regard for the constraints of flooding, biodiversity, and impacts on agriculture.
	Once the current strategic vision is fulfilled, the subject land will enjoy a central location within the growth area, with adjoining properties on all sides providing reasonable assurance of ongoing maintenance.
Not approving any strategic planning document, local planning policy, or planning scheme amendment that will result in the introduction or intensification of development in an area that has, or will on completion have, more than BAL 12.5 rating under AS3959-2018 Construction of Buildings in Bushfire-prone Areas (Standards Australia, 2018).	This report is prepared in support of an Application for Planning Permit which can be approved given future Villas can achieve construction to a minimum BAL 12.5.

Areas of Biodiversity Conservation Value	
Strategy	Response
Ensure settlement growth and development approvals can implement bushfire protection measures without unacceptable biodiversity impacts by discouraging settlement growth and development in bushfire affected areas that area important areas of biodiversity.	The proposed development will not result in any further loss of native vegetation. Existing approvals have presumed the entire parcel will be developed for residential purposes. The subject Application represents a variation on that same theme, offering an alternative style of residential development.

Use & Development Control in Bushfire Prone Area	
Strategy	Response
When assessing a Planning Permit Ap	oplication for uses and development:
Consider the risk of bushfire to people, property and community	The long held expectation for the subject land is that the property will be utilised for residential development.
infrastructure.	Establishment of a Retirement Village in this location is most appropriate having regard for the surrounding residential use and proximity to commercial and community infrastructure.
	By maintaining single ownership, the development will enjoy resilience to bushfire by ensuring the environment remains at a managed low threat state.
Require the implementation of appropriate bushfire protection measures to address the identified bushfire risk.	Development is expected to exceed the construction requirements for BAL 12.5 thereby enhancing protection and resilience from fire.
	The built form and common landscaping themes as proposed will enable ongoing management and maintenance by a single entity, providing a degree of assurance beyond that which would be delivered by a proliferation of individual owners.
	Bushfire risk from adjoining Grassland can be appropriately managed, until such time as this area transitions to residential development, consistent with the strategic vision for the precinct.
	Section 7 of this Report provides further detail of proposed bushfire mitigation strategies.
Ensure new development can implement bushfire protection measures without unacceptable biodiversity impacts.	The subject land will be free of native vegetation ensuring biodiversity impacts are not increased.
	The proposed external road alignments have been designed to ensure that future development of adjoining land to the west can be undertaken in accordance with the aspirations of the Paynesville Growth Area Structure Plan.

5. Policy Guidelines

Policy Guidelines & Documents	Response
The following must be considered as relev	vant:
Any applicable approved state, regional and municipal fire prevention plan.	The Municipal Fire Prevention Plan has been considered. See section 6.7 of this report.
AS 3959-2018 Construction of Buildings in Bushfire-prone Areas (Standards Australia, 2018)	Australian Standard AS3959 has been used as part of this assessment to classify slope and vegetation to determine BAL 12.5 requirements for the property
Any bushfire prone area map prepared under the Building Act 1993 or regulations made under that Act.	The current Bushfire Prone Area mapping has been considered as part of this report.
	The subject land is a Designated Bushfire Prone Area.

6. Bushfire Risk

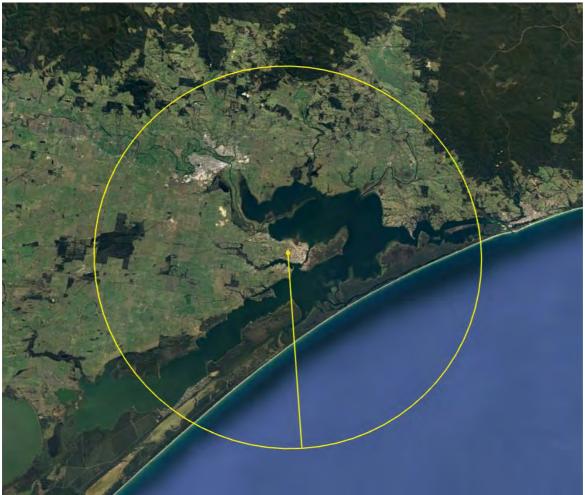
Clause 13.02-1S relating to *Bushfire Planning* triggers the need to consider and assess the bushfire hazard based on:

- Landscape conditions;
- Local conditions;
- Neighbourhood conditions; and
- The site for the development.

6.1 Landscape Conditions

In considering and assessing the bushfire hazard, the landscape risk has taken into consideration the extent of vegetation cover, the area available to a landscape bushfire, terrain and accessibility to low threat areas.

Clause 13.02-1S describes 'landscape conditions' as conditions in the landscape within 20km (and potentially up to 75km) of a site.



Landscape Conditions within 20km of the subject land (Source: Google Earth)

Key features within the 20km assessment area surrounding the site include:

- Large areas of residential and rural residential development, particularly to the east and north-west of the property, including the settlements of Paynesville, Raymond Island, Metung, Nungurner, Swan Reach, Johnsonville, Nicholson, Sarsfield, Bairnsdale, Newlands Arm and Loch Sport
- Large areas of Grassland coverage throughout most of the assessment area, much of which is utilized for grazing activities.
- The most northern portion of the 20km assessment area contains forested areas connected to a larger expanse of vegetation which provides a distant threat from bushfire.
- Whilst the terrain within most of the assessment area is flat or mildly undulating, the land within the northern tip of the assessment area is much steeper, beginning to incorporate large hills as the land beyond begins to expand into the foothills of the Great Dividing Range.
- The Gippsland Lakes and Bass Strait occupy a substantial portion of the assessment area, including fringing wetlands and coastal vegetation along the Ninety Mile Beach. These bodies of water have the effect of interrupting long fire runs through surrounding grazing land.
- The land between the subject land and the township area of Bairnsdale to the north-west is not vegetated and is easily accessed by a good quality sealed road network.

The subject land is surrounded by established residential, evolving residential and grazing properties. The vegetation within the wider landscape is mostly representative of Grassland which generally provides a low risk to bushfire.

6.2 Local Conditions

Clause 13.02-1S describes 'local conditions' as conditions in the area within approximately 1km of a site.



Local conditions within 1km of the subject land (Source: Google Earth)

Key features within the 1km assessment area of the subject land include:

- The assessment area is predominantly divided into farmed Grassland (to the west) and residential development (to the west). Residential development extends along Newlands Drive, to the south of the assessment area, and to the north within the Eagle Bay Village and Toonalook Waters estates.
- Paynesville Road, which is categorised as a Road Zone Category 1, dissects the assessment area in an east-west direction to the north of the assessment area. Whilst there is some roadside vegetation along this corridor, the extent of vegetation is not of sufficient area to be determined classifiable under AS3959.
- Grandview Road runs in a north-south direction on the western periphery of the assessment area. Roadside vegetation adjoining this road is also insufficient in area to warrant classification under AS3959.
- The Bairnsdale Golf Club is located further west, beyond the assessment area. This is a well maintained property containing vegetation excluded from classification under AS3959.

- The landform is predominantly flat in nature, with the exception being the sloping land immediately adjoining the frontage to the Newlands Backwater, containing modified vegetation.
- Planted vegetation is established in associated with public uses including the Cemetery, Primary School and the AJ Freeman Reserve. Each of these areas are well maintained, managed to a low fuel condition.
- A Reserve for drainage and recreation to the immediate east of the subject land contains modified vegetation including maintained Grassland, scattered large trees and low-threat wetland vegetation.
- The predominant fire threat to the assessment area remains the area to the west earmarked for residential growth, but currently defined as Grassland.

6.3 Neighbourhood Conditions

Clause 13.02-1S describes 'neighbourhood conditions' as conditions in the area within 400 metes of a site.



Neighbourhood conditions within 400m assessment area (Source: Google Earth)

Key features within the 400m assessment area of the subject land include:

• Presence of numerous residential properties. These properties represent a low threat vegetation classification.

- Vacant residential land to the south of the assessment area forms part of an approved residential development, with five stages completed to date. Development of the residential estate is estimated to be completed within the next three years.
- Farming Grassland to the west, actively grazed to reduce fuel loads.
- Grassland containing scattered trees with a canopy cover of less than 10% is located to the immediate east and south, transitioning to either excludable Reserve or low threat residential properties, consistent with existing approvals.
- There are two notable areas of established vegetation, firstly to the south of the subject land in the rear of properties in Woodland Court, and to the north of the subject land adjoining the Cemetery and Paynesville Road. Being over 100m from the subject land and of limited area (less than 1 hectare), each of these areas of vegetation are considered excludable vegetation.
- The landform is predominantly flat.

6.4 Bushfire Scenarios

Bushfire from the West

The most likely bushfire scenario for this site considering the landscape, will be for a fire approaching from the west, given the presence of more expansive Grassland vegetation. Such a fire would have the potential for long and fast fire runs through the Grassland and patches of vegetation.

Areas of excludable vegetation, such as the Bairnsdale Golf Club, established Firebreak Roads, such as Grandview Road, Paynesville and Lake Victoria Road, and established residential and rural residential properties within Eagle Point would all be expected to contribute to the containment of the fire front, preventing long fire runs.

Considering the climate of the area, a westerly wind represents approximately 11% of all wind direction between the months of October and April, as recorded at the Bairnsdale Airport from 1942 and current 2019 data (Bureau of Meteorology, http://www.bom.gov.au/climate/averages/tables/cw_085279.shtml), further demonstrating prevailing winds in the local climate are more likely to originate from the east or south-east, with this number being over 55%.

Considering the climate, the largely residential development and waterways presiding over these directions in the wider landscape, the subject land is deemed to be of low fire risk from natural landscape factors.

Localised Grass Fires

From the remaining aspects there is a minor threat from more localised Grassland fires. Existing features described above, such as excludable vegetation and Firebreak Roads, will all assist in slowing the run of localised grass fires. The largely flat landform ensures the fire threat can be mitigated by the adjoining Grassland continuing to be managed in a low fuel condition through grazing and slashing, as currently occurs.

Further mitigation can be provided by the installation of a Colorbond fence that will provide shielding from the prevailing fire threat.

6.5 Bushfire Hazard Site Assessment

Vegetation on the subject land and the immediately surrounding area has been classified in accordance with Table 2.3 of Australian Standard AS 3959, consistent with Clause 13.02-1S of the *East Gippsland Planning Scheme*.



Aerial view of subejct land and immediate surrounds (Source: Google Earth)

Exclusions & Low Threat Vegetation

Surrounding residential development to the north, east and further south contain minimal vegetation and are predominantly managed, cultivated garden areas, representing low threat vegetation and excluded vegetation under Clause 2.2.3.2 of AS3959:2018.

Areas of vegetation associated with the Cemetery (to the north) and to the rear of residential properties in Woodland Court are also considered excludable, given they are more than 100m from the site and less than 0.25ha in area.

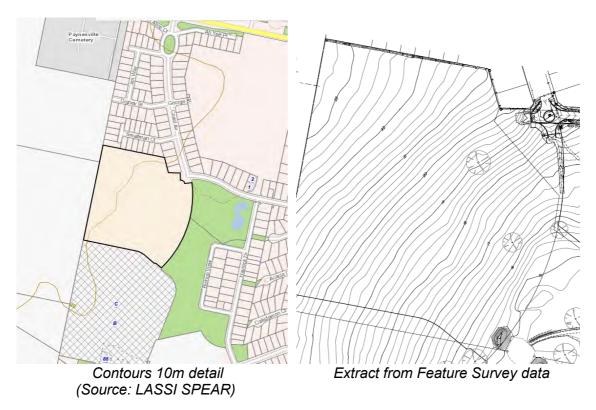
Grassland Classification

Whilst currently assessed as Grassland, the area to the south of the subject land will be lost in the short term and therefore will not pose a hazard to the subject land in the future. This area of Grassland will be further modified as a result of the approved subdivision, creation of internal roads, further development of the Reserve for drainage and recreation, and establishment of residential allotments into the future which will ultimately result in a low threat environment.

The area of Grassland to the west will also ultimately change to a low threat environment in accordance with the strategic intent of the Paynesville Growth Area Structure Plan.

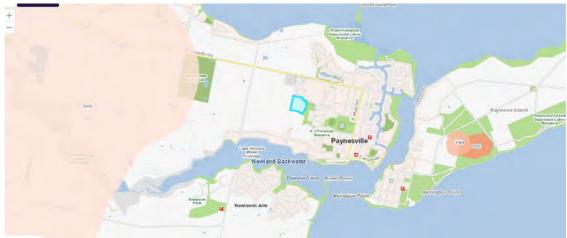
Topography

The subject land and surrounding area are predominately flat. The subject land slopes slightly in a south-easterly direction, at a gradient of approximately 2% (1:36).



6.6 Other Bushfire Matters

Previous fire history within the wider landscape includes the 1978 Forge Creek fire, and two smaller fires on Raymond Island in 1981 and 1992 (Mapshare Vic). There is no record of bushfire history on the subject land or generally within the Paynesville township. There are no records of planned burns within proximity of the subject land.



Bushfires 1970 - Present (Source: MapShare Vic)

6.7 Municipal Fire Management Plan

The *East Gippsland Shire Council Municipal Fire Prevention Plan* (October 2009) identifies the fire risk and the associated works to be undertaken to reduce risk for the Municipality.

Section 9.1.9 of the Plan encourages the maintenance of ploughed or slashed breaks on grazing land for better visibility, safety for fire fighting crews and low hazard links between properties (p. 21).

The Plan identifies Paynesville Road (to the north) and Grandview Road (to the west) as Primary Firebreak Roads which are the responsibility of the Paynesville Fire Brigade.

7. Bushfire Mitigation Strategies

Whilst future developed conditions will see the conversion of adjoining Grassland to the west and south to low threat as the precinct transforms to residential development, the proposal at hand must have regard for current conditions. The following bushfire mitigation strategies are proposed:

- Erection of a 1.8m high Colorbond fence along the length of the western boundary, acting as a shield from the adjacent grazing land; and
- Maximise separation from the fire hazard by ensuring a strip of the adjoining Grassland is continued to be managed to a low fuel condition during the fire season. Consistent with current practices, the strip must achieve a minimum width of 19m, which represents the minimum separation for Grassland on flat land under Column A to Table 1 of Clause 53.02-5.

For over 70 years Albert Ah Yee has managed the Grassland areas adjoining Paynesville, and always keeps the margins of his family's agricultural holding managed to a low fuel condition during fire season. The strip of land maintained at exceeds a minimum width of 19m (being the minimum separation required under Table 1 to Clause 53.02-5 for Grassland on flat land).

In the event that this regular activity was to cease, through a change in management or ownership, Council would have the ability to issue a Fire Prevention Notice pursuant to Section 41 of the *Country Fire Authority Act 1958* and Section 313 of the *Local Government Act 2020* should the grass fail to be managed in a low fuel condition. The management of this Grassland could therefore be defined as being to the satisfaction of the Responsible Authority.

We believe this provides reasonable assurance that the separation distance of 19m as required under Column A to Table of Clause 53.02-5 can and will continue to be managed to a low fuel condition during fire season.

8. Concluding Remarks

In summary the proposed development at 91 Coast Avenue, Paynesville has considered the bushfire controls under the *East Gippsland Planning Scheme* and will not result in any adverse outcomes with respect to bushfire risk as appropriate bushfire mitigation measures can be put in place.

Crowther & Sadler Pty Ltd February 2021

Crowther & Sadler Pty Ltd.

A.B.N. 24 006 331 184

152 Macleod S PO Box 722 Bairnsdale, VIC 387

\$ 52090

Surveyor

MEMBE

LICENSED SURVEYORS & TOWN PLANNERS

Our ref: 18741

9 March 2021

Coordinator Statutory Planning East Gippsland Shire Council Via email: <u>planning@egipps.vic.gov.au</u>

Attention: Robert Pringle

Dear Robert,

Re: Planning Application 349/2020/P Use and development of a Retirement Village and subdivision to create roads and reserve 97 Coast Avenue, Paynesville

I am pleased to provide an update following our recent discussions in relation to management of the adjoining grassland to minimise bushfire hazard.

Our Client continues in their negotiations with the adjoining owner regarding the purchase of the adjoining land, with the intention of undertaking further residential subdivision (subject to further Council approval), in accordance with the Paynesville Growth Areas Structure Plan.

I am advised that my Client and the adjoining owner, Mr. Albert Ah Yee, have struck a gentlemen's agreement regarding the ongoing management of a 20m wide strip of land immediately adjoining our Client's project site, which will be undertaken by and at the expense of my Client, until such time as the land is developed for residential purposed and, as a consequence, maintained in a low fuel condition.

I am also advised that our Client is willing to amend the staging of the project to provide for each of the villas adjoining the western site boundary to be developed within the final stage, being Stage F. Please find attached a Villa Staging Plan prepared by Crossco Consulting that provides a pictorial representation of this commitment.

As previously offered, our Client would also accept a Condition that requires the construction of a Colorbond fence across the western boundary, to provide the site with shielding in accordance with AS3959:2018.

We trust that these combined factors are sufficient to provide Council with appropriate assurance that the fire threat from adjacent grassland can be appropriately managed in perpetuity.

Principal: Michael J. Sadler, L.S., Dip Surv, M.I.S., MAICD

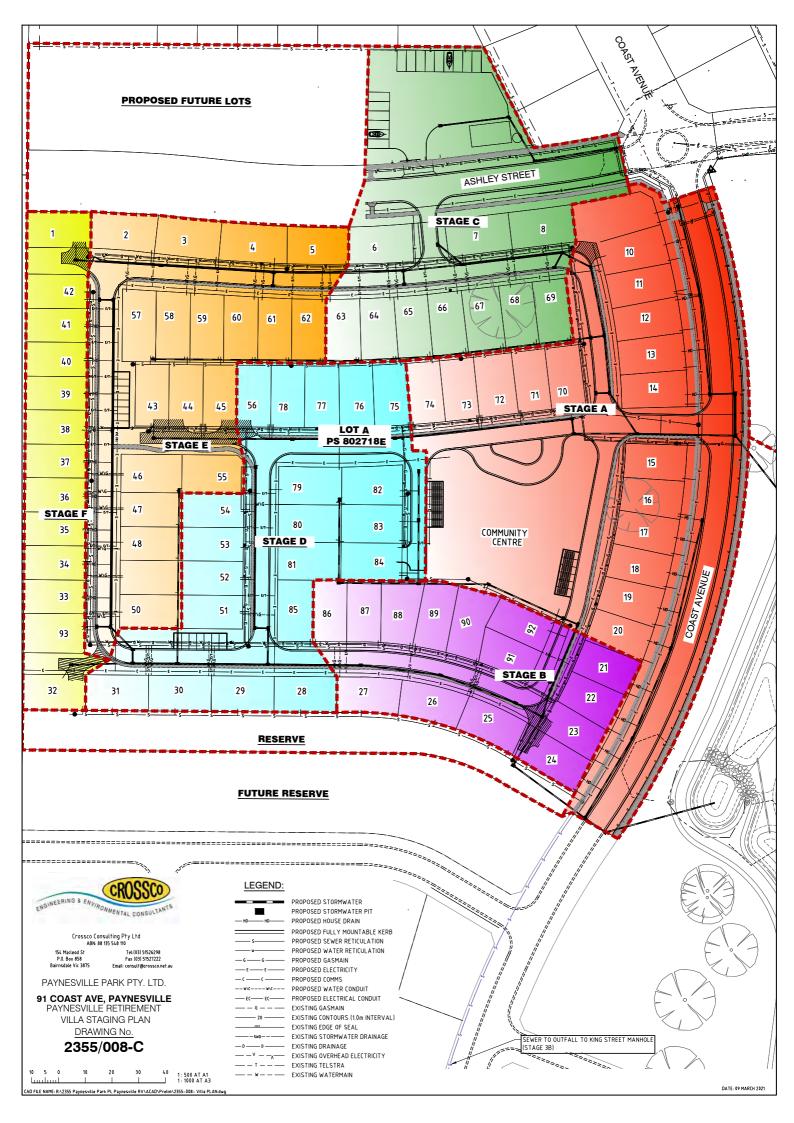
We have also prepared a Subdivision Staging Plan to demonstrate the progressive manner in which the extension of Coast Avenue, the extension of Ashley Street, and the section of Reserve in the southern portion of the subject land will be delivered.

Finally, we thank Council for the opportunity to review the draft conditions which are likely to appear within the Council Report. We have provided our comments (via tracked changes) for Council's consideration, with some suggestions offered that we believe will assist in providing a more workable Planning Permit.

As always, please do not hesitate to contact our office should you have any queries in relation to the attached.

Regards,

Encl. Villa Staging Plan prepared by Crossco Subdivision Staging Plan (Version 1) Proposed Permit Conditions (tracked changes)



LICENSED SURVEYORS & TOWN PLANNERS

Our ref: 18741

14 December 2020

Acting Senior Land Use Planner East Gippsland Shire Council Via email: <u>planning@egipps.vic.gov.au</u>

Attention: Mr. Robert Pringle

Dear Robert,

Re: Request to end Legal Agreement AQ868619Y 91 Coast Avenue, Paynesville Lot A on PS802718E Our Client: *Paynesville Park Pty. Ltd.*

Council is currently considering Planning Application 349/2020/P which was lodged on 8 September 2020, seeking approval for the use and development of a retirement village, together with subdivision to create reserves for road and public open space.

We understand the project has not received any objections as a result of public notification, and that the Application will now be determined in the Council Chamber in the New Year, given the estimated cost of development exceeds that able to be determined by Council Officers under delegation.

Should Council determine the Application favourably, it is our expectation that a Condition of Planning Permit will require the ending of the Section 173 Legal Agreement as applying to the subject land prior to the Planning Permit having any force or effect. In anticipation of a favourable determination, and having regard for Council's reporting timeframes, we respectfully request Council's consent to the ending of Agreement AQ868619Y ('the current Agreement') pursuant to Section 178A(1)(b) of the *Planning and Environment Act 1987* as applying to the subject land.

Agreement AF202923J ('the previous Agreement') had previously applied to the subject land and all adjoining lots within the Paynesville Park estate and the former Coast subdivision. This included the 90 existing residential lots to the north of the subject land, the nine vacant lots (including the subject land) with frontage to Ashley Street created upon the registration of PS 742846B, the larger balance lot to the north-east which has previously been approved for the use and development of a Residential Village, Lots 1-32 (inclusive) on PS 802718E created within Stage 2 of the Paynesville Park estate, and all of the previously undeveloped balance land to the south of Ashley Street formally described as Lot A on PS 802718E and Lot 2 on PS 802715L.



Surveyors

MEMBER

152 Macleod St. PO Box 722, Bairnsdale, VIC 3875

> P: 5152 5011 F: 5152 5705

We understand the purpose of the previous Agreement was to ensure consistency between two separate Planning Permits issued for the subject land; Planning Permit 583/2004/P/A which approved the subdivision of the Coast estate, and Planning Permit 94/2007/P which approved a two lot subdivision to facilitate the staged purchase of the entire property as part of a terms contract between the Vendors, the Ah Yee family, and the former Developer of the Estate.

The previous Agreement was executed in accordance with Condition 2 on Planning Permit 94/2007/P which sought to establish a connection to the broader approval granted by Planning Permit 583/2004/P/A. The previous Agreement sought to ensure future development would be consistent with the configuration, layout and staging reflected in the plans endorsed under Planning Permit 583/2004/P/A as amended from time to time, except with the prior written consent of Council.

We are advised an option with the former Developer was not pursued, with the Vendors subsequently entering a Contract of Sale with Paynesville Park Pty. Ltd, who took ownership of Lot 1 on PS 729135M on 15 April 2016. Paynesville Park Pty. Ltd. have proceeded with the subdivision of the property, with titles issued for Stages 2 and 3A, and Stage 3B expected to be completed early in 2021.

We understand that the intent of the previous Agreement was that upon the completion of a stage of subdivision, that the obligations of the previous Agreement were intended to be deemed to have been satisfied.

In practice, this is not what occurred, and Paynesville Park Pty. Ltd. has successfully negotiated with Council to execute the current Agreement for the balance of the Paynesville Park estate. This means that any vacant residential lots lawfully created in Stages 2-8 (inclusive) would be absolved from any ongoing obligations.

With Council's consent, Paynesville Park Pty. Ltd. executed an updated Agreement to provide greater flexibility for all parties moving forward, and to reflect the amendments to Planning Permit 583/2004/P/D. The previous Agreement was ended in accordance with Section 177(2)(b) of the *Planning & Environment Act 1987*.

The use and development proposed by Planning Application 349/2020/P represents a change in direction away from that anticipated by the Agreement, which will not be considered as an amendment to Planning Permit 583/2004/P/D as amended by Council. On that basis, the subject Application represents a new direction that requires the ending of the Agreement as it applies to the subject land.

Whilst the proposed development represents an outcome not anticipated by the Agreement, the primary intent of the Agreement is maintained by the modified proposal, namely those critical elements of the development that have an impact on the orderly development of the precinct.

This includes the extension of Ashley Street and King Street, the latter being unrelated to the subject application), the delivery of drainage infrastructure with the reserve to the east of the subject land (also unrelated), and the proposed Reserve that is partly included within the southern portion of the subject land, that provides drainage and pedestrian connectivity to the adjacent greenfield site.

It is our expectation that should Council determine the subject Application favourably, that a new Agreement would be required as a Condition of Permit to ensure the requirement for these elements remain a clear expectation in perpetuity.

Section 178A(2)(b) requires the application to be *"accompanied by the information required by the regulations"*. In accordance with the requirements of Regulation 55 of the *Planning & Environment Regulations 2015* we provide the following requisite information:

Regulation 55(a) - we confirm the Applicant for the request to end the Agreement is Paynesville Park Pty. Ltd., C/- Crowther & Sadler Pty. Ltd of 152 Macleod Street, Bairnsdale, Victoria, 3875. Phone number for the Applicant is 5152 5011.

Regulation 55(b) – the Agreement is to be ended as it applies to 91 Coast Avenue, Paynesville, formally described as Lot A on PS 802718E.

Regulation 55(c) - not applicable to the subject Application as the proposal does not seek to amend the Agreement.

Regulation 55(d)(i) – not applicable to the subject Application as the proposal does not seek to end the Agreement in part.

Regulation 55(d)(ii) – the proposal seeks to end the Agreement as it applies to 91 Coast Avenue, Paynesville, formally described as Lot A on PS 802718E.

Regulation 55(d)(iii) – the use and development proposed by Planning Application 349/2020/P will achieve a Planning outcome that differs from that anticipated by the Agreement. This request enables the ending of the Agreement to be considered in parallel with the Planning Application process, which included a process of public notification from which there were no objections received. We believe this demonstrates the process has been robust and transparent.

To assist with Council's consideration of our request in accordance with Section 178(B)(2) of the Act, we are pleased to provide the following information.

Purpose of the Agreement

The purpose of Agreement AQ868619Y was to establish a connection in perpetuity between the two Permits issued by Council for the former Coast development, ensuring that the approval of the two lot subdivision (Planning Permit 94/2007/P) did not preclude the subdivision of the subject land in accordance with the broader vision for the Coast estate as approved by Planning Permit 583/2004/P/A.

Why the Agreement is no longer required

The proposed development seeks to achieve an outcome that varies from that depicted on endorsed plans under Planning Permit 583/2004/P/D upon which the Agreement relies, therefore should Council determine the subject Application favourably then the Agreement must be ended.

The obligations of the Agreement with relevance to the subject land can continue to be preserved through a new Legal Agreement, including those elements of interest to Council including the centralised drainage/open space network, or the extension Ashley Street to the west. The ending of the Agreement as it applies to the subject land will not prevent the further development of the balance of the residential estate.

Whether the ending of the agreement would disadvantage any person, whether or not a party to the agreement

The ending of the Agreement will not give rise to any form of disadvantage to any other person. The removal of the Agreement does not provide any change in the activities that may occur on the site today 'as of right', without the need for further Planning approval.

The Planning Application for the subject land that sought to alter the existing conditions included a process of public notification to provide other parties with the opportunity to raise their concerns with respect to disadvantage, with any such concerns able to be considered by Council as part of their assessment of any Planning Application. No such concerns were raised. On that basis we confidently state that the ending of the Agreement in itself will not disadvantage any person.

The reasons why the responsible authority entered into the agreement

The previous Agreement was appropriately entered into by Council at the time in accordance with Condition 2 on Planning Permit 94/2007/P. The current Agreement was entered into by Council to provide greater flexibility in accordance with Planning Permit 583/2004/P/D.

Any relevant permit or other requirements the land is subject to under the *Subdivision Act 1988*

None applicable.

Any other prescribed matter

We are not aware of any other prescribed matter which is relevant to the request to end the Agreement as it applies to the subject land.

Section 178A(2)(c) of the Act requires an application of this type to be accompanied by the requisite fee as prescribed by the *Planning & Environment* (*Fees*) *Regulations 2016*. This request is accompanied by the requisite fee prescribed by Regulation 16.

We trust this information provides sufficient detail to facilitate Council's commencement of the process associated with the ending of the Agreement as it applies to the subject land. We respectfully await Council's timely advice regarding the scheduling of this matter on the next available Ordinary Council Meeting agenda.

Regards,

MICHAEL SADLER

Encl. Fees (\$643.00) Copy of Title

TITLE DOCUMENTATIONS AVAILABLE AS A PART OF ATTACHMENT 2 - PLANNING PERMIT APPLICATION.



Our Ref: DOC/20/52543

16 October 2020

East Gippsland Shire Council (planning@egipps.vic.gov.au)

Attention: Robert Pringle,

EGSC REFERENCE NUMBER(S): 349/2020/P FOR: SUBDIVISION OF LAND (ROADS & RESERVE), USE & DEVELOPMENT OF RETIREMENT VILLAGE LOCATION: 91 COAST AVENUE PAYNESVILLE (LOT A PS802718) APPLICANT: CROWTHER & SADLER PTY LTD

In response to your letter of 22 September 2020, regarding the above Planning Permit application, East Gippsland Water does not object provided the permit is subject to the following conditions:

- Water and sewer reticulation infrastructure (including sewer connection points) must be extended to service each Lot to East Gippsland Water's requirements, at the cost of the Applicant/Developer. Subject to East Gippsland Water's requirements being met, relevant infrastructure will then become Gifted Assets (refer Notes). Each Lot is to be separately serviced by the water and sewer reticulation system and able to be separately metered (water) as appropriate to the satisfaction of East Gippsland Water.
- 2. Should the Developer decide <u>not</u> to Gift newly created Assets to East Gippsland Water, a Supply By Agreement (private supply – water and sewer) must be negotiated prior to design approval and signed prior to issue of Statement of Compliance.
- 3. Arrangements for the design, construction, commissioning and acceptance of all Gifted Assets required by East Gippsland Water to extend water and / or sewerage services to each Lot require <u>written</u> approval by East Gippsland Water.
- Provide easements on the plan of subdivision over newly created or existing infrastructure, as required by East Gippsland Water in accordance with Section 136 of the Water Act 1989; including assets constructed in Common Property and/or under Section 12(2) easement over the land.
- 5. Common Areas (e.g. Community Centre) to be separately connected/meter to reticulated water supply; no Master Meters will be approved.
- 6. Any connection of proposed water storage tanks to the reticulated water supply must have approved backflow preventions devices/management to prevent cross contamination.
- 7. Provision of acceptable electronic/digital map to use as an overlay on GIS that shows Unit/Leasehold boundaries and 'street' addresses in order to effectively provide operation and maintenance services as well as responding to faults. This information will also be required for rating purposes.
- 8. Payment of applicable Development Planning Charges by the Applicant/Developer to East Gippsland Water (refer Notes)





Notes:

- (A) Subject to its written acceptance of the Gifted Assets, East Gippsland Water will become responsible for ownership and the ongoing maintenance and operation of the assets in perpetuity.
- (B) Development Planning Charges apply where East Gippsland Water are involved in the developer's works (actual charge is based on the final cost of the works). Contact East Gippsland Water for further information on these fees.
- (C) Any additional infrastructure required to adequately service the development would need to be provided by the developer at the developer's cost. The type and extent of additional infrastructure, if needed, is subject to detailed engineering design and approval by East Gippsland Water.
- (D) A back-flow prevention device needs to be installed prior to connecting any commercial units (Hotel, Restaurant, Café) to the reticulation water infrastructure; and
- (E) A Trade Waste Agreement may need to be executed between the owner(s) of the commercial units and EGW prior to connecting the development to the reticulation sewerage infrastructure.
- (F) No structure or fill is to be placed over East Gippsland Water works and/or easements without prior agreement by East Gippsland Water.

Further enquiries may be directed to Kristine Hunter (5150 4425) at our Bairnsdale Office.

Yours faithfully,

CAROL ROSS EXECUTIVE MANAGER CUSTOMERS

Cc: Crowther & Sadler Pty Ltd 152 Macleod St Bairnsdale 3875 (contact@crowthersadler.com.au)



Robert Pringle

From:	Kristine Hunter on behalf of Planning <planning@egwater.vic.gov.au></planning@egwater.vic.gov.au>
Sent:	Tuesday, 16 February 2021 3:04 PM
To:	Robert Pringle
Subject:	FW: Urgent - review planning permit conditions 349/2020/P
Attachments:	Attachment 1 Proposed Permit Conditions.docx
Importance:	High

EXTERNAL EMAIL: This email has originated from outside of the East Gippsland Shire Council network. Do not click links or open attachments unless you recognise the sender and know the content is safe. Contact ICT ServiceDesk if you are unsure.

Robert,

Sorry for the late reply but I have been away.

I can understand the confusion, however the only wording I would change for EGW conditions is that each Lot/Unit must be separately connected to sewer and be capable of being separately connected/metered for water.

This would take into account the Government directive that any dwelling or property that is capable of being separately metered MUST be separately meter (Fair Water Bills Act).

Regards, Kris Hunter

Kristine Hunter Manager Development Assessments Phone: 03 5150 4425 Fax: 03 5150 4477 Email Web: www.egwater.vic.gov.au





From: Robert Pringle Sent: Thursday, 4 February 2021 10:32 PM To: Planning Planning@egwater.vic.gov.au>;
'subdivisions@ausnetservices.com.au'

Cc: Planning Unit Administration <Planning@egipps.vic.gov.au> Subject: RE: Urgent - review planning permit conditions 349/2020/P

Good morning,

As a follow up, please find attached draft planning permit conditions, *noting these have not been provided in full to the permit applicant*. I specifically draw your attention to proposed condition 8, which requires the buildings to be fully serviced prior to occupation. This condition does not anticipate:

- Easements, etc, through the development to accommodate the service lines, if such are to be maintained as gifted assets rather than as private infrastructure.
- Any other specific requirements other than the need for the services to be connected.

Robert Pringle Statutory Planning Coordinator

Please consider the environment before printing this e-mail.

From: Robert Pringle Sent: Thursday, 4 February 2021 9:38 PM To: planning@egwater.vic.gov.au; subdivisions@ausnetservices.com.au; Cc: Crowther & Sadler ______Administration <planning@egipps.vic.gov.au> Subject: Urgent - review planning permit conditions 349/2020/P Importance: High

, Planning Unit

Good morning,

349/2020/P – 91 Coast Avenue Paynesville Lot A PS 802718E USE AND DEVELOPMENT OF A RETIREMENT VILLAGE, BUSINESS IDENTIFICATION SIGNAGE AND SUBDIVISION (CREATION OF ROAD AND RESERVE)

I refer to the abovementioned matter, noting that the plans previously distributed in 2020 may have been interpreted by the relevant referral authorities that each proposed villa was to be separately subdivided. This is not the case.

In discussion with the permit applicant, we are requesting a review of the recommended referral authority permit conditions, recommending that the wording be amended to reflect that the subdivision of the land will effectively create road reserves and a public open space reserve in accordance with the attached staging plan.

It is anticipated that there may be specific desired wording for the separate metering and servicing of the villas. The staging of the development is:

Stage A	Villas 9-20*, 70-74*, Community Centre and Coast Avenue extension (stage 1 subdivision
	following road construction)
Stage B	Villas 37-39*, 43-46*, 55-56*, 75-79* and 82-84*
Stage C	Villas 6-8*, 63-69* and Ashley Street extension (stage 2 subdivision following road construction)
Stage D	Villas 33-36*, 47-54*, 80-81*, 85 & 93, Workshop and Caravan/Boat Storage area
Stage E	Villas 21-32*, 86-92* and Reserve (stage 3 subdivision to implement the reserve)
Stage F	Villas 1-5*, 40-42* and 57-62*
* inclusive	of Lot numbers nominated herein

In accordance with Council's Delegations Policy, this matter is being reported to EGS Council. Amendments are appreciated as soon as practical to meet our reporting deadlines, however this request is being documented in the report to leadership and Council Briefing and can be removed from the final public report.



 Robert Pringle
 ■ Statutory Planning Coordinator
 ■ East Gippsland Shire Council

 ■ P: 03 5153 9500
 ■ F: 03 5153 9576
 ■ PO Box 1618, Bairnsdale, Vic 3875

 ➡ Please consider the environment before printing this e-mail.

Robert Pringle

From:	Planning Unit Administration
Sent:	Friday, 30 October 2020 8:02 AM
То:	Robert Pringle
Subject:	FW: (DWS Doc No 8718981) RE: 349/2020/P - 91 Coast Avenue PAYNESVILLE -
	Subdivision, use and development of the land for a retirement village

Kerry Stow *Land Use Administration Officer*

Please consider the environment before printing this e-mail.

From: Subdivisions <Subdivisions@apa.com.au>
Sent: Friday, 16 October 2020 3:26 PM
To: Planning Unit Administration <Planning@egipps.vic.gov.au>
Cc: Subdivisions <Subdivisions@apa.com.au>
Subject: (DWS Doc No 8718981) RE: 349/2020/P - 91 Coast Avenue PAYNESVILLE - Subdivision, use and development of the land for a retirement village

EXTERNAL EMAIL: This email has originated from outside of the East Gippsland Shire Council network. Do not click links or open attachments unless you recognise the sender and know the content is safe. Contact ICT ServiceDesk if you are unsure.

APA GROUP

APT O&M Services Pty Ltd (APT) is a company under the APA Group.

Our Reference: ps 16102020 - 07

Enquires: Paula Soluncevski Telephone 9463 8323

Dear Sir/Madam,

Re: APPLICATION FOR PLANNING PERMIT 91 COAST AVENUE PAYNESVILLE Plan No. :

Reference is made to the above correspondence dated 08.09.2020 and accompanying plan.

APT pursuant to Section 56 (1) (b) of the Planning and Environment Act 1987 has no objection to the granting of a permit.

APT does not require the plan to be forwarded under Section 8 of the Subdivision Act 1988, and consents to the issue of a statement of compliance at the appropriate time.

Yours faithfully,

dwa1511.htm

From: David Brann [David.Brann@ausnetservices.com.au]
Sent: Monday, 25 January 2021 10:25:42 AM
To: Subdivisions; Planning Unit Administration
Subject: RE: 349/2020/P - 91 Coast Avenue PAYNESVILLE - Subdivision, use and development of the land for a retirement village

EXTERNAL EMAIL: This email has originated from outside of the East Gippsland Shire Council network. Do not click links or open attachments unless you recognise the sender and know the content is safe. Contact ICT ServiceDesk if you are unsure.

Hi Kerry,

I have included AusNet's standard subdivision conditions below, please add to permit.

The plan of subdivision submitted for certification must be referred to AusNet Electricity Services Pty Ltd in accordance with Section 8 of the subdivision Act 1988.

The applicant must -

- Enter in an agreement with AusNet Electricity Services Pty Ltd for supply of electricity to each lot on the endorsed plan.
- Enter into an agreement with AusNet Electricity Services Pty Ltd for the rearrangement of the existing electricit supply system.
- Enter into an agreement with AusNet Electricity Services Pty Ltd for rearrangement of the points of supply to a
 existing installations affected by any private electric power line which would cross a boundary created by the
 subdivision, or by such means as may be agreed by AusNet Electricity Services Pty Ltd.
- Provide easements satisfactory to AusNet Electricity Services Pty Ltd for the purpose of "Power Line" in the favour of "AusNet Electricity Services Pty Ltd" pursuant to Section 88 of the Electricity Industry Act 2000, where easements have not been otherwise provided, for all existing AusNet Electricity Services Pty Ltd electric power lines and for any new power lines required to service the lots on the endorsed plan and/or abutting land.
- Obtain for the use of AusNet Electricity Services Pty Ltd any other easement required to service the lots.
- Adjust the position of any existing AusNet Electricity Services Pty Ltd easement to accord with the position of the electricity line(s) as determined by survey.
- Set aside on the plan of subdivision Reserves for the use of AusNet Electricity Services Pty Ltd for electric substations.
- Provide survey plans for any electric substations required by AusNet Electricity Services Pty Ltd and for associated power lines and cables and executes leases for a period of 30 years, at a nominal rental with a righ to extend the lease for a further 30 years. AusNet Electricity Services Pty Ltd requires that such leases are to be noted on the title by way of a caveat or a notification under Section 88 (2) of the Transfer of Land Act prior t the registration of the plan of subdivision.
- Provide to AusNet Electricity Services Pty Ltd a copy of the plan of subdivision submitted for certification that shows any amendments that have been required.
- Agree to provide alternative electricity supply to lot owners and/or each lot until such time as permanent supply is available to the development by AusNet Electricity Services Pty Ltd. Individual generators must be provided each supply point. The generator for temporary supply must be installed in such a manner as to comply with th Electricity Safety Act 1998.
- Ensure that all necessary auditing is completed to the satisfaction of AusNet Electricity Services Pty Ltd to allo the new network assets to be safely connected to the distribution network.

To progress this project please request the developer complete an online new estate application & pay the fees.

Regards

David Brann Energy Project Coordinator Complex AusNet Services Leongatha Ph 03 5667 0571 or

file:///C:/DAT/ Email



Our patron, Her Excellency the Honourable Linda Dessau AC, Governor of Victoria

CFA Fire Prevention and Preparedness 8 Lakeside Drive Burwood East Vic 3151 Email: firesafetyreferrals@cfa.vic.gov.au

CFA Ref: 11000-72203-107169 Council Ref: 349/2020/P

2 March 2021

Robert Pringle East Gippsland Shire Council 273 Main Street BAIRNSDALE VIC 3875

Dear Robert,

CONDITIONAL CONSENT TO GRANT A PERMIT INCLUDING CERTIFICATION HOWEVER, COMPLIANCE IS REQUIRED

Application No:	349/2020/P
Applicant:	C/- Crowther & Sadler Pty Ltd
Site Name:	Subdivision & Retirement Village
Address:	91 Coast Avenue, Paynesville
Purpose:	Subdivision, use and development of land for a retirement village.

CFA, acting as a Referral Authority pursuant to Section 52 of the Planning and Environment Act does not object to the grant of a permit to Crowther & Sadler Pty Ltd for the subdivision at 91 Coast Avenue Paynesville subject to the following conditions being attached to any permit which may be issued, and a copy of the permit being forwarded to CFA.

- Start of Conditions -

1. Subdivision plan not to be altered

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

2. Hydrants

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

- 2.1 Above or below ground operable hydrants must be provided. The maximum distance between these hydrants and the rear of all building envelopes (or in the absence of building envelopes, the rear of the lots) must be 120 metres and the hydrants must be no more than 200 metres apart. These distances must be measured around lot boundaries.
- 2.2 The hydrants must be identified with marker posts and road reflectors as applicable to the satisfaction of the Country Fire Authority.
- Note –CFA's requirements for identification of hydrants are specified in 'Identification of Street Hydrants for Firefighting Purposes' available under publications on the CFA web site (www.cfa.vic.gov.au)

3. Roads

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

- 3.1 The average grade must be no more than 1 in 7 (14.4%) (8.1 degrees) with a maximum of no more than 1 in 5 (20%) (11.3 degrees) for no more than 50 meters. Dips must have no more than a 1 in 8 (12%) (7.1 degree) entry and exit angle.
- 3.2 Curves must have a minimum inner radius of 10 metres.
- 3.3 Have a minimum trafficable width as per endorsed Drawing No. 2355/007-A.

– End of Conditions –

Additional Comments

I refer to the meeting between Council, Crowther & Sadler and CFA on the 10/02/2021 were the Bushfire Hazard Assessment dated 9 February 2021 was discussed. It is noted that the development is located within a Bushfire Prone Area and has an interface of classifiable vegetation (Grassland) to the west of the development and that the proposed vegetation mitigation measure are to be managed by a third party off site.

CFA strongly recommends that all bushfire mitigation measures be contained within the boundaries of the proposed development.

CFA also consents under Section 9 of the Subdivision Act to the Certification of the Plan of Subdivision. CFA does not require the Plan of Subdivision for this planning permit application to be referred under Section 8 of the Subdivision Act.

CFA does NOT consent to the Statement of Compliance for Subdivision at this stage.

If you wish to discuss this matter, please do not hesitate to contact Peter Rogasch, Fire Safety Officer, on 0437 012 114.

Yours sincerely

David Griffin Bushfire & Land Use Planning Assessor FIRE PREVENTION & PREPAREDNESS

cc: Crow ther & Sadler Pty Ltd contact@crow thersadler.com.au

Detailed Assessment of the Proposal Against the East Gippsland Planning Scheme

State Planning Policy Framework

Clause 11 Settlement

The purpose of the policy is to direct development growth to existing settlement areas, especially in Regional Victoria. The desired outcome is for existing social and built infrastructure to be utilised before expansion or extension of settlement areas. Settlements are to adapt to environmental conditions, including natural hazards and climate change. Liveability and social wellbeing are high priorities.

Clause 13 Environmental Risks

Noise, climate change (coastal inundation), flooding, bushfire, and erosion are all relevant risks associated with the subject land. The policy generally seeks to minimise risk associated with these factors through design of the built environment, separation of land uses, and avoidance of risk, where appropriate.

Clause 14.02 Water

The policy requires consideration of water management and drainage, seeking to prevent contamination and degradation of water quality as a result of development. The policy also seeks to promote on-site detention of stormwater to reduce management issues off-site.

Clause 15 Built Environment

The policy requires consideration of the interaction between the built form and the environment and the proposal and existing development. It also calls for design to consider safety, health, context, use of the public realm, and other key design considerations that will provide a positive community outcome.

Clause 16 Housing

The objective is to achieve architectural and urban design outcomes that contribute positively to local urban character and enhance the public realm while minimising detrimental impact on neighbouring properties.

State Policy Summary

On the balance of all relevant factors, the proposal before Council is viewed as providing a market-specific residential housing choice to a segment of the population. The proposal is unlikely to have any negative amenity impacts on the neighbourhood and will be complementary to the existing neighbourhood character.

The proposed use and development is primarily residential, with limited social facilities provided at the southern end of the site. Given the market demographic, it is not expected that there will be any amenity impacts on the surrounding neighbours.

Environmental risks have been considered, and can be managed through conditions of approval. The environmental risks are reasonably well avoided on the subject land. As detailed later in this report, the land does not have a high erosion risk.

Bushfire risk is mitigated through management of the site and surrounds to reduce wildfire from impacting on the development. The sequencing of the construction will allow for on-site management, and it is hoped that by the time the final stage is constructed that more certainty will be provided regarding the Paynesville Growth Area, which will further provide bushfire protection via border development.

Local Planning Policy Framework

Clause 21 Municipal Strategic Statement

Paynesville is identified as a main town, and as such is a priority area for development and investment. The town is heavily influenced by tourism, recreational and commercial fishing activity, and provision of aged care and retirement facilities. The whole community is affected by climate change (coastal inundation), erosion, flooding and/or bushfire risks due to the geographic features and constraints.

Clause 21.03-1 (Planning for growth areas)

Objectives 1 & 2 relate to East Gippsland main towns and guide planning decisions and outcomes to give support to infill development over dispersed development. The strategies seek to provide appropriate services and infrastructure.

21.04-3 Urban Waterways

The objective of this clause is to protect and enhance the ecological health of urban waterways.

21.05 Environmental Risk

Similar to State Policy, this section of policy requires consideration of the risk from flooding, bushfire, and erosion. Development proposals should respond appropriately to these natural hazards.

Clause 21.07-1 (Urban design)

Much like the State policy, this clause seeks to ensure that development is in keeping with landscape and town character, and has a high standard of design.

Clause 21.07-3 (Sustainable development)

It is important for Council to consider the possible impacts upon the community and social impacts that may arise. Clause 21.07-3 states that new development and land use applications must be considered against the positive and negative social impacts that it may cause. It also calls for future development to contribute to a liveable, productive and sustainable community.

Clause 21.08 (Housing)

Objective 1, Strategy 1.1 identifies that the housing needs and preferences of all segments of the community must be addressed, and that a supply of elderly persons' housing in the main centres should be provided. Additionally, East Gippsland should be developed as a retirement destination.

Clause 21.10 (Transport)

Specific strategies under the clause cause consideration of the need to minimise direct access and egress points to highways and to consider the potential impact of highways (noise) on proposed development.

Clause 21.12-2 (Lakes & Coastal)

Opportunities for the Lakes and Coastal sub-region include quality lifestyle and attractive retirement area. Constraints include impacts of climate change, storm surge, and other natural hazards. Strategies include encouraging population growth and development in fully serviced residential land in the major towns and recognising the need to provide for an aging population, including provision and maintenance of relevant Shire infrastructure (ie. footpaths).

Paynesville has been identified as a tourist town with strong ties to recreational boating and other maritime related activities. Key objectives and strategies include improving pedestrian linkage and vehicular circulation and safety, expanding the town boundary to provide high

quality residential development, and ensuring development further supports boating destinations and other tourism opportunities and spaces within this area.

Local Planning Policy Framework summary:

The proposal is located on the suburban western edge of Paynesville where growth opportunities have been identified. Vehicular access is granted via a short drive off a local arterial road (Paynesville Road).

The site considered is also located well within key activity areas. These include:

- Paynesville Tennis and Bowling Club 1 2 minutes directly east along Ashley Street;
- Esplanade shopping, town beach 5 minute drive south-east
- Sunset Cove & associated walking track 6 minute drive south
- Gippsland Lakes Yacht Club 5 minute drive south-east

Not only is the subject site well within key activity areas, a caravan and boat storage yard is also provided for use by its residents. For those that are unable to drive, "Dial a bus" services are available in addition to the provision of taxi vouchers.

High consideration has been given to natural hazards, urban waterways, and sustainable development, demonstrated through water sensitive urban design principals proposed for the site, and through appropriate servicing and design.

The application triggered the Social Impact Assessment (SIA) per the *SIA Guidelines for Development*. The applicant has considered the relevant matters of a Social Impact Assessment Guidelines and provided a response with the application. The proposal will be a net user of social services in the community, however will provide on-site social services and amenities for residents and their guests. These social facilities will include a men's shed, community facility, and an indoor pool. There will be the creation of a limited number of employment opportunities, and there are unlikely to be any negative or significant social impacts as a result of the proposal. It is viewed that the proposal can achieve a net benefit to the community while managing and protecting reasonable levels of amenity.

The proposal is generally supported by meeting the objectives and strategies of the Local Planning Policy Framework.

Zone

Clause 32.08 – General Residential Zone

The General Residential Zone allows this application to come forward as the use of land for a retirement village is nested within the accommodation definition and is a Section 2 Use.

Retirement Village is defined in the Planning Scheme as:

Land used to provide permanent accommodation for retired people or the aged and may include communal recreational or medical facilities for residents of the village.

Purposes of the zone are:

- To implement the State Planning Policy Framework and the Local Planning Policy Framework, including the Municipal Strategic Statement and local planning policies.
- To encourage development that respects the neighbourhood character of the area.
- To encourage a **diversity of housing types** and **housing growth** particularly in locations offering good access to services and transport. (emphasis added)
- To allow educational, recreational, religious, community and a limited range of other non-residential uses to serve local community needs in appropriate locations.

Decision Guidelines

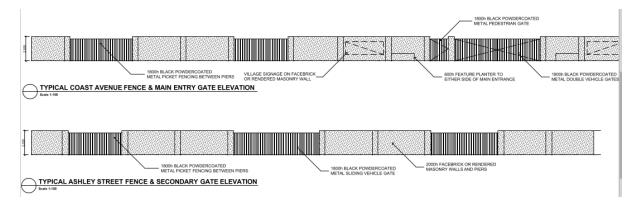
General

- The State Planning Policy Framework and the Local Planning Policy Framework, including the Municipal Strategic Statement and local planning policies.
- The purpose of this zone.
- The objectives set out in a schedule to this zone.
- Any other decision guidelines specified in a schedule to this zone.

Assessment:

The proposal fits the definition of retirement village including the provision of communal areas through the community centre and provides for a diversity of housing in an area earmarked for housing growth. The applicant considers that the use of the land as a retirement village rather than 'two or more dwellings on a lot' extinguishes the need for a detailed assessment of Clause 55 of the planning scheme (check). The first residents have a choice of housing in a very regulated setting. A simplified assessment has been carried out and provided with the application. The proposed development generally meets the objectives and standards of Clause 55.

Of importance, the interfaces between the retirement village and surrounding residential uses are predominantly rear-to-a street or proposed reserve, with appropriate setbacks in place. The type of fencing is important as this will be the public interface along Coast Avenue and Ashely Street. The proposal is for 2m high fencing with alternating panels of black powder coated metal picket fence and rendered masonry wall. The figure below are elevations of the proposed fencing along Coast Avenue and Ashley Street.



Additionally, the proposed units are single storey, and will be unlikely to cause overlooking and overshadowing. The arrangement of lots within the centre and along the eastern and western portion of the site have not been completely determined and will remain flexible during the construction until capacity is reached. There is some concern that lots 25 - 32 and 57 - 69 will not receive a reasonable amount of solar access into their secluded private open space areas, particularly as these areas will be located south of their dwelling. These are considered minor in light of the high level of public open spaces afforded elsewhere within the proposed development.

The palette of indicates the mix of natural and contemporary 'greys' for both the community centre and the villas.. The figure below illustrates the mix of colours and materials to a high standard finish:



On the balance of all relevant factors, the application is assessed as being acceptable in the location proposed and consistent with the General Residential Zone.

Overlays

Clause 42.02 - Design and Development Overlay Schedule 14 (DDO14)

As all buildings and works proposed are less than 7.5 metres above natural ground level, a permit is only triggered under the overlay for subdivision. The subject site has been identified in the Paynesville Urban Design Guidelines as being part of the Town Expansion Precinct (Area 7) where high quality residential subdivision is sought.

The subdivision pattern is similarly spaced with the existing pattern of development already established within the area. The proposed roads are designed in a way that forms a natural extension of Coast Avenue and Ashley Street. Through the continuation of Coast Avenue and withholding of development to the west of the Ashley Street extension, this respects adjoining development and leaves a level of flexibility still in the growth of these areas. The staging of the subdivision is also considered practical and appropriate given the size of the project.

Clause 44.01 – Erosion Management Overlay (EMO)

While the permit is not triggered by the Erosion Management Overlay, given the purpose of this overlay and its proximity to the site, due consideration for the effects of this overlay was considered. It is noted that while it abuts the boundaries of the subject site, it does not touch areas of the development itself.

Particular Provisions

Clause 52.05 – Signage

The General Residential Zone classifies signage as Category 3 – High Amenity, where a planning permit is required to display a business identification sign. The proposal is for a a

sign at the entry of the community centre and access entry signs affixed to the fence. The sign above the Community centre entry will not be visible to anyone outside the retirement village due to the generous setbacks of the building.

Two signs of 3.1sqm (3.1mx1m) are proposed to be fixed to the eastern fence visible along Coast Avenue. These signs will not be illuminated and integrated with the fence facing the recreation reserve. Given the size and location these signs serve to identify the retirement village and unlikely to impact road safety.

Clause 52.06 – Car Parking

The plans submitted with the application provides double garages for each dwelling (186 car spaces) with 27 off-street visitor parking. A retirement village triggers the need for:

- 1 car space to each one or two bedroom dwelling; plus
- 2 car spaces to each three or more bedroom dwelling (with studies or studios that are separated rooms counted as a bedroom); plus
- 1 car space for visitors to every five dwellings for developments of five or more dwellings.

Each dwelling provides two car spaces each. Given that the development provides for 93 separate lots, this requires an additional 18 car spaces for visitors. As an additional 27 has been provided, the development provides a surplus of 9 additional car spaces from what is considered reasonable to provide for a retirement village.

The application was also referred to the Senior Technical Officer who reviewed the application and expressed support of the car parking and accessway layouts subject to conditions to be incorporated into any permit approval.

Clause 53.18 Stormwater Management

The application has submitted a stormwater management strategy. It recommends the incorporation of an onsite detention system and reuse with a subsurface 52,000L tank and a 2,000L rainwater tank to each villa plumbed in for toilet flushing and irrigation. The workshop will be provided with a 5,000L water tank. Any permit issues will include conditions for the assessment and approval of the strategy.

Clause 56 – Residential Subdivision

An application to subdivide land in the General Residential Zone should meet the standards and must meet the objectives of Clause 56. The subdivision component sets aside areas for the provision of two public roads (Coast Ave & Ashley St) and part of a reserve (south) to be consistent future delivery of key infrastructure as part of the Paynesville Growth Area Structure Plan (PGASP) (July 2016). The retirement village itself will be retained within one larger allotment. The following is an assessment of the proposal against standards although limited as no vacant residential allotments are being created:

	Description	Obj	St	COMMENTS
C1	Strategic Implementation		Ø	The application is accompanied by a written statement that details how the proposal meets the relevant aspects of the East Gippsland Planning Scheme. A staging plan has been provided.

	Description	Obj	St	COMMENTS
C2	Compact and walkable Neighbourhood			The subdivision pattern is designed in a manner that will promotes the approved PGASP by reserving Coast Ave and part of Ashley St whilst allowing a reservation for future continuation.
C3	Activity Centre	N/A	N/ A	The subject site is approximately 1.9km away from the main town centre (approximately 23 minutes' walk according to Google Maps).
C4	Planning for Community Facilities		Ø	The development adds to the growing need of housing accommodation for the ageing population in an area within close proximity to a range of services and facilities afforded to Paynesville
C5	Built Environment			By keeping developments single storey and employing a range of high quality materials and landscaping varieties and densities, the development minimises any visual detriment along Coast Avenue and Ashley Street thorough a mix of metal picket fences and rendered masonry walls
C6	Neighbourhood Character			The creation of the roads will facilitate integration with the PGASP and the diversity of dwellings will add to the character of the area.
C7	Lot Diversity and Distribution			The main lot will allow for a diversity of dwellings. The road continuation will also for the community to access arterial roads.
C8	Lot Area and Building Envelopes		Ø	The villas have been shown to be accommodated with the provision of open space both private and communal.
C9	Solar Orientation of Lots			Each villa types have been designed to ensure appropriate solar access.
C10	Street Orientation			The village will be inward looking to the community centre. This is to allow for a sense of safety and social interaction within the village.
C11	Common Area			Common areas mainly consists of the community centre and pedestrian links. Public access is encouraged during daylight hours only.
C12	Integrated Urban Landscape			Landscaping plan indicates a theme for the entire site.
C13	Public Open Space provision			Proposal is for 4.3% of the total site area. This is above the previous contributions of land provided by earlier stages of the development
C14	Integrated Mobility		V	The landform allows for limited mobility and the design encourages movement without a vehicle.

	Description	Obj	St	COMMENTS
C15	Walking and Cycling Network		Ø	Speed restrictions within the village and pedestrian paths are well connected.
C16	Public Transport Network			Public transport and arterials roads are located nearby.
C17	Neighbourhood Street Network		Ø	The extensions of Coast Avenue and Ashley Street have been designed to be public roads. The internal roads within the village will be private roads and not appear on the Council's roads Maintenance Register.
C18	Walking and Cycling Network Detail			The paths will be required to be designed for all abilities to access.
C19	Public Transport Network Detail			The proposal will utilise what is existing in the precinct.
C20	Neighbourhood Street Network Detail			The internal and external roads will be designed to the relevant standards, with standard conditions ensuring this.
C21	Lot Access			Roads have been designed to the standard requirements and conditions on any permit will ensure this.
C22	Drinking Water Supply		V	Water supply will be provided in accordance with East Gippsland Water
C23	Reused and Recycle Water			Each villa has the ability to install a watertank. Reticulated reuse and recycled water not available in the region.
C24	Waste Water Management		Ø	Each villa will be connected to sewer.
C25	Stormwater Management			Stormwater strategy has been prepared. Landscaping will include urban sensitive urban design and water tanks encouraged.
C26	Site Management		Ø	Construction management plan condition will form part of any permit issued.
C27	Shared Trenching		Ø	Service s layout plan demonstrated how shared trenching will be utilised where possible.
C28	Electricity, Telecommunica tions and Gas			Each villa will be provided with the full suite of services.
C29	Fire Hydrants		Ø	These will be installed in accordance with CFA requirements
C30	Public Lighting Objective			To be provided throughout the development with additional surrounding the community centre and entry.

\square - Compliance \square - Non compliance

General Provisions

Clause 65 – Decision Guidelines

Planning must take into consideration a range of matters, including the relevant provisions of the planning scheme, the orderly planning and amenity of the area, the purpose of the applicable zones and overlays, and any aspects of a proposal that may result in adverse outcomes. Council is bound by Clause 65 and Section 60 of the Act to take into account any objections and submissions that may have been received as a part of the public notification period. In this case, no objections or submissions were received.

As to the wider merits and issues of the application, it is considered that:

- The proposal is consistent with the objectives of planning in Victoria, the PPF and MSS;
- The use and development will build upon the growing sector of the housing market while enabling further support and co-existence with the local tourism and recreational maritime opportunities and activities;
- The development and built form will be in keeping with the general residential pattern of this neighbourhood of Paynesville;
- The use and development will contribute to the wider community and will provide accommodation for a growing sector of the housing market; and
- Any potential amenity, environmental, and cultural impacts can appropriately be managed by permit conditions.