

APPROVED DEVELOPMENT PLAN SUMMARY

The following development plan has been approved by the Chief Executive Officer and signed by a Director of East Gippsland Shire Council. The development plan runs with the subject land into perpetuity however is able to be amended in part or in full, subject to Council approval. This document serves a summary and document control function.

Address	110-138 Palmers Road, Lakes Entrance
Approval date	20 June 2018

This development plan is comprised of the following documents

	Document	Date	Version	No of Pages
1	Development Plan Report	May 2018	2	38
2	Site Analysis Plan	May 2018	2	1
3	Site Locality Plan	May 2018	2	1
4	Site Context Plan	May 2018	2	1
5	Proposed Development Plan	May 2018	2	1
6	Proposed Subdivision	May 2018	4	1
7	Staging Plan	May 2018	4	1
8	Road Hierarchy Plan	May 2018	2	1
9	Vegetation Plan	May 2018	2	1
10	Geotechnical Risk Assessment	September 2013	-	5
				Total 51

This development plan has been amended as follows

[illegible]

Approved Development Plan
Planning and Environment Act 1987
East Gippsland Planning Scheme

**Development Plan Overlay Schedule 8
(Lakes Entrance Northern Growth Area)**



Signed:
Director, East Gippsland Shire Council
Date:20 June 2018...

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Development Plan

110-138 Palmers Road,
Lakes Entrance

Land in TP282593
Lot 2 on PS505056

Our reference: 17400

10 May 2018



Approved Development Plan
Planning and Environment Act 1987
East Gippsland Planning Scheme

**Development Plan Overlay Schedule 8
(Lakes Entrance Northern Growth Area)**

Report Register

This register documents the development and issue of report entitled Development Plan – 110-138 Palmers Road, Lakes Entrance prepared by Crowther & Sadler Pty Ltd in accordance with internal quality management systems.

Kate Nelson

Signed:
Director, East Gippsland Shire Council
Date: 20/05/2018

Issue date	Version No.	Description	Issued to
3/11/2017	1	Development Plan	EGSC
10/05/2018	2	Revisions following consultation	EGSC

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Approved Development Plan
Planning and Environment Act 1987
East Gippsland Planning Scheme

Development Plan Overlay Schedule 8
(Lakes Entrance Northern Growth Area)

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Appendix A: Geotechnical Risk Assessment - Simon Anderson Consultants

Approved Development Plan
Planning and Environment Act 1987
East Gippsland Planning Scheme

1. Introduction

Development Plan Overlay Schedule 8
(Lakes Entrance Northern Growth Area)

This Development Plan is prepared in accordance with Clause 3.0 of Schedule 8 to the Development Plan Overlay as contained within the *East Gippsland Planning Scheme*. This document applies to the property located at 110-138 Palmers Road, Lakes Entrance. The property is comprised of two parcels and is formally described as land in Title Plan 282593 and Lot 2 on Plan of Subdivision 505056.

Clause 3.1 to Schedule 8 of the Development Plan Overlay details specific components for any Development Plan in accordance with the *Lakes Entrance Northern Growth Area Outline Development Plan* (October 2013) ('LENGA ODP'). This document provides a response to those requirements as appropriate.

Approved Development Plan
Planning and Environment Act 1987
East Gippsland Planning Scheme

2. Site Analysis

Development Plan Overlay Schedule 8
(Lakes Entrance Northern Growth Area)

The subject land is an irregular shaped parcel approximately 20.73 hectares in area. Palmers Road adjoins the subject land for the entire length of the western boundary.

Signed:
Director, East Gippsland Shire Council

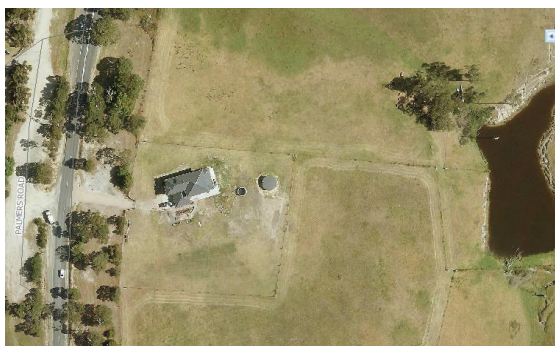
Date: 20 June 2018

The subject land is currently developed with two existing dwellings. To the south of the property, a single storey brick veneer home has been constructed with frontage to Palmers Road in the west. This dwelling is surrounded by a number of large gum trees with multiple outbuildings, and is sited to the west of the drainage line.

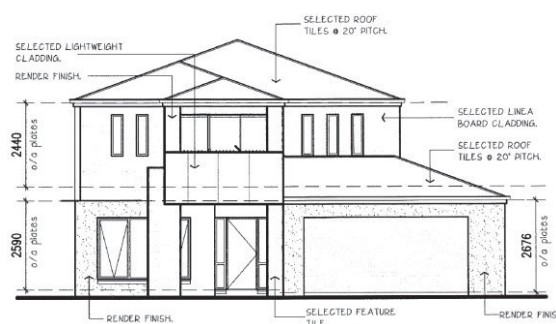


Southern dwelling viewed from above (L) and the west (R) (Source: Google Earth)

More recently, a modern, two storey home has been constructed to the north of the property close to the Palmers Road frontage, again sited to the west of the main drainage line. Landscaping around this more recent inclusion is becoming established, with vehicle access provided from Palmers Road to the west.



*Aerial view of central dwelling
(Source: Geovic 3)*



*Extract from approved dwelling plans
(Planning Permit 405/2013/P)*

The subject land also contains a yard with a number of industrial sheds associated with the owner's fishing business. This yard area has been located on site for in excess of fifteen years and enjoy existing use rights pursuant to Clause 63.01 of the *East Gippsland Planning Scheme*. Access is established via Palmers Road to the west.



Aerial view of industrial area (Source: Geovic 3)



View of industrial area looking south

The balance of the subject land is vacant land dissected by a major gully system line that runs through the property draining to the south. The gently undulating landform has good grass coverage, managed by cattle grazing, with scattered remnant vegetation.



Looking south-east across the drainage line towards Bass Strait

Land to the east of the subject land has been progressively developed for residential purposes by Merrangbaur Heights Pty. Ltd.



Looking east from Palmers Road, with residential properties visible in the distance

Land to the immediate north of the subject land is currently developed with three existing dwellings. The northernmost home is a grand, double storey, brick veneer home oriented to maximise expansive southerly views.



Northernmost dwelling viewed from Thorpes Lane (Source: Google Earth)

A range of outbuildings have been established in association with this dwelling, many related to the keeping and training of horses on site. Additional equestrian facilities include a round yard and dressage ring. Access to this northern dwelling is provided from Thorpes Lane to the north via an established concrete crossover.



Aerial photo of northernmost dwelling (Source: Google Earth)

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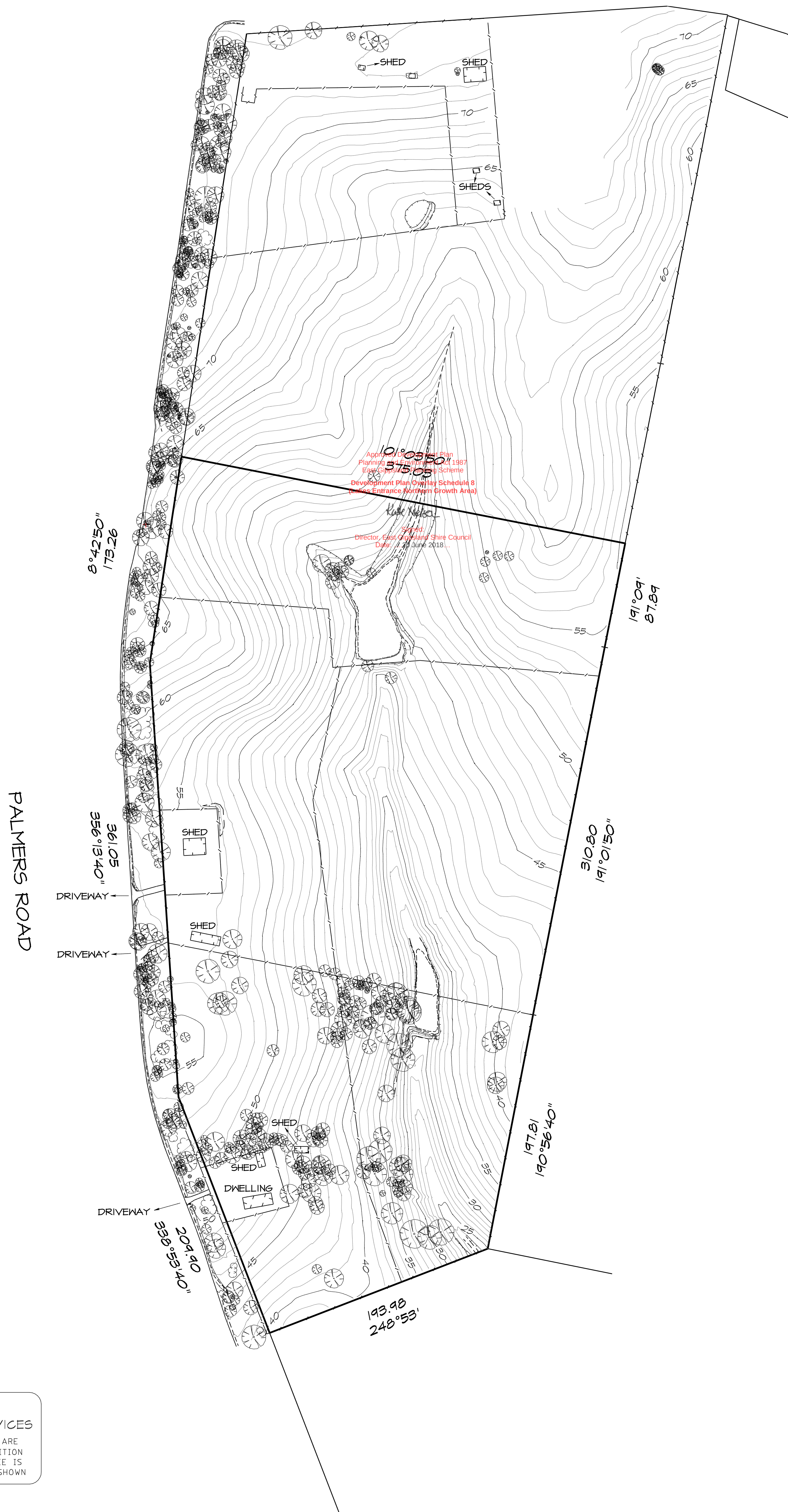
The subject land is undulating in form, predominantly falling in a southerly direction dissected by a centralised gully system which leads ultimately into Eastern Creek to the south. Levels vary across the site by up to 48 metres, from a height of 60m AHD towards the northern boundary, down to 25m AHD along the gully floor.

Signed:
Director, East Gippsland Shire Council
Date: 29 June 2018

A Site Analysis Plan (Figure 1) provides information derived via field survey regarding the topography of the site and the location of existing vegetation. There are no easements registered on any title within the subject land.


 MGA94 ZONE 55

THORPES LANE



WARNING
BEWARE OF UNDERGROUND SERVICES

THE LOCATION OF UNDERGROUND SERVICES ARE APPROXIMATE ONLY AND THEIR EXACT POSITION SHOULD BE PROVEN ON SITE. NO GUARANTEE IS GIVEN THAT ALL EXISTING SERVICES ARE SHOWN

110-138 PALMERS ROAD, LAKES ENTRANCE

Crowther & Sadler Pty. Ltd.

LICENSED SURVEYORS & TOWN PLANNERS
152 MACLEOD STREET, BAIRNSDALE, VIC., 3875
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FILENAME: N:\Jobs\17000-17999\17400-17499\17400 Gulliot\17400 Site Analysis V2.pro

SCALE (SHEET SIZE A1)

1 : 2000

SCALE (SHEET SIZE A3)

1 : 4000

SURVEYORS REF.

17400

VERSION 2 - DRAWN 07/05/2018

NOTATIONS

RE-ESTABLISHMENT DATUM VIDE LP140153 & LP210631

HEIGHTS ARE TO A.H.D. VIDE PM162 (R.L.72.055m)

CONTOUR INTERVAL : $1m$

DATE OF SURVEY : SEPTEMBER 2010

SITE ANALYSIS PLAN

PARISH OF COLQUHOUN
CROWN ALLOTMENTS 125 & (PART) 26A

TP282593D
LOT 2 - PS505056

Approved Development Plan
Planning and Environment Act 1987
East Gippsland Planning Scheme
Development Plan Overlay Schedule 8
(Lakes Entrance Northern Growth Area)

A Site Locality Plan (Figure 2) provides an illustration of the position of the subject land within the broader context of the Lakes Entrance township, as well as demonstrating the largely unsubdivided nature of much of the LENGA precinct, with the exception of the residential lots within the Merrangbaur Estate to the east, and those developed to the west of Palmers Road within the Lakes View Estate.

Signed:
Director, East Gippsland Shire Council
Date:20 June 2018...

A Site Context Plan (Figure 3) provides similar information but at a closer scale, enhanced by aerial photography which demonstrates the minimal development that has occurred on adjoining properties, which typically comprise either rural style dwellings on larger vacant allotments utilised for grazing, or smaller rural residential allotments. An oblique aerial photo is incorporated within this plan that depicts the expansive view enjoyed from the subject land.

SITE LOCALITY PLAN

PARISH OF COLQUHOUN
CROWN ALLOTMENTS 125 & (PART) 26A

TP282593D
LOT 2 - PS505056

110 PALMERS ROAD &
30 THORPES LANE, LAKES ENTRANCE

NAJob\17000-17889\17400-17489\17400 Gulliver\17400 Site Locality V2.dwg



MGSA94, ZONE 55

VERSION 2 : 07/05/2018

SURVEYORS REF.

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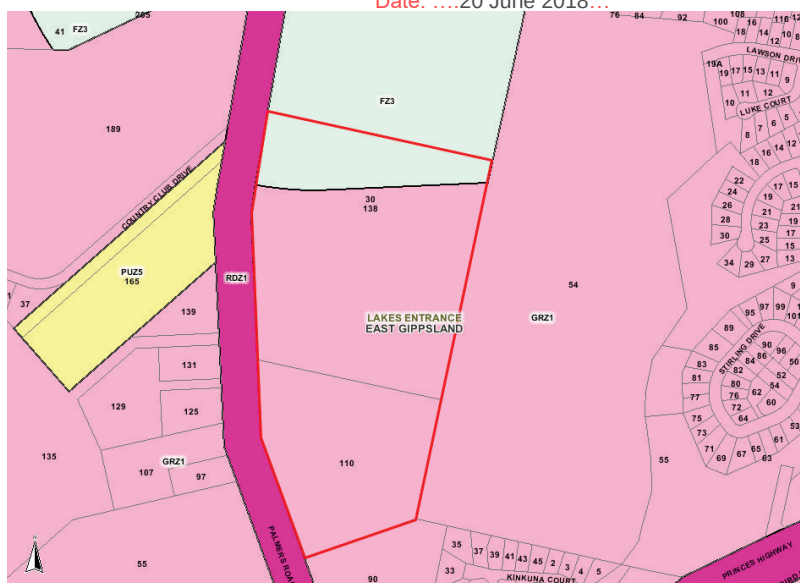
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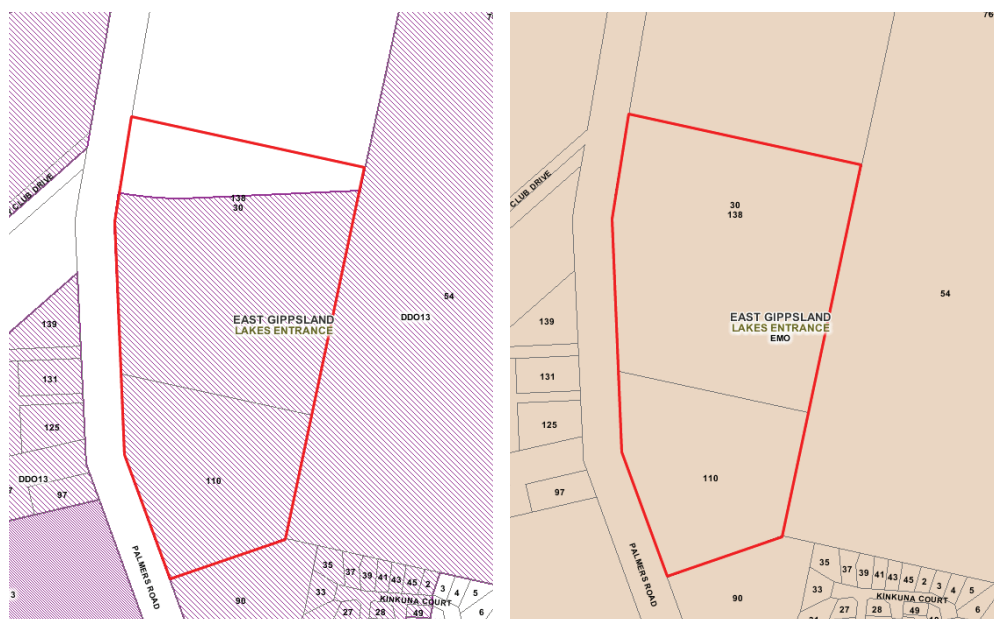
The subject land is dissected by a Zone boundary, which coincides with the 500 metre buffer adopted from the Municipal Landfill at 5 Thorpes Lane. The northernmost portion of the subject land, which equates to approximately 3.22 hectares, is affected by the Farming Zone Schedule 3 provisions, and the southern portion of approximately 17.51 hectares contained within the General Residential Zone of the *East Gippsland Planning Scheme*.

Signed:
Director, East Gippsland Shire Council
Date:20 June 2018....



Extract from Planning Maps with subject land outlined in red
(Source: Planning Maps Online)

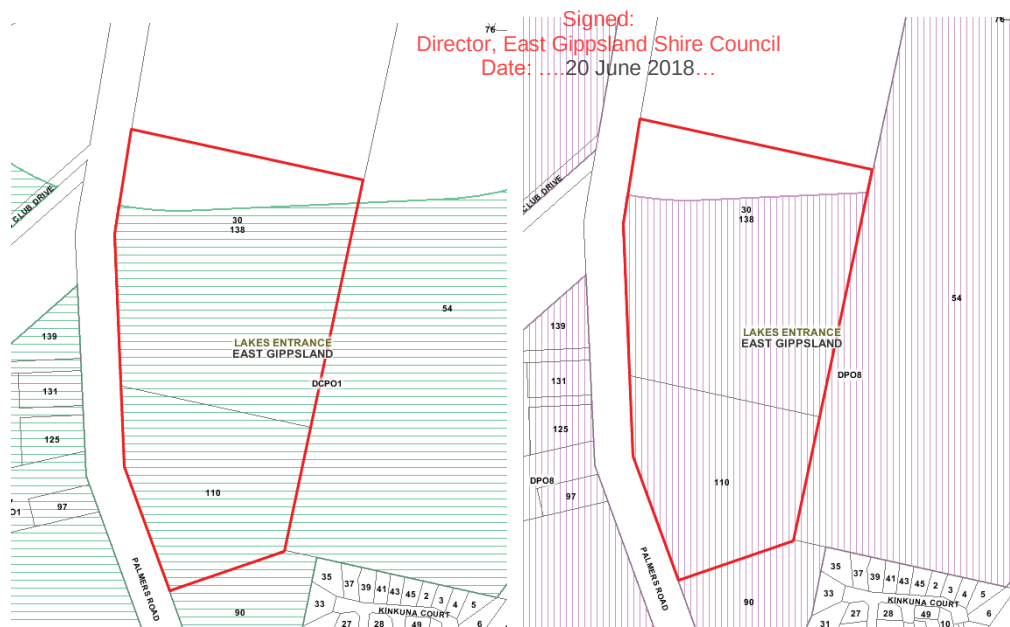
A range of Planning Overlays apply to the subject land. The Design and Development Overlay – Schedule 13 (*Residential Development in Coastal Settings: Lakes Entrance*) applies to all land within Lakes Entrance which has been zoned for residential purposes. The Erosion Management Overlay applies to the majority of the municipality with proximity to the coast.



(L) Design & Development Plan Overlay No. 13; (R) Erosion Management Overlay
(Source: Planning Maps Online)

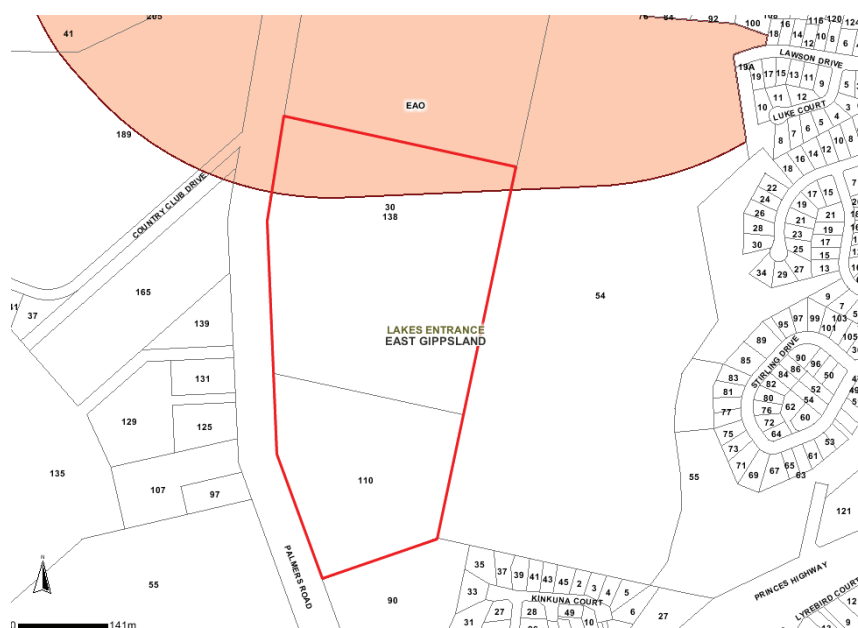
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Development Plan Overlay Schedule 8
(Lakes Entrance Northern Growth Area)

Amendment C112 introduced a range of Overlays which apply to the residentially zoned portion of the subject land, including the Development Contributions Plan Overlay (No. 1), the Development Plan Overlay - Schedule 8 (Lakes Entrance Northern Growth Area) and the Environmental Audit Overlay.



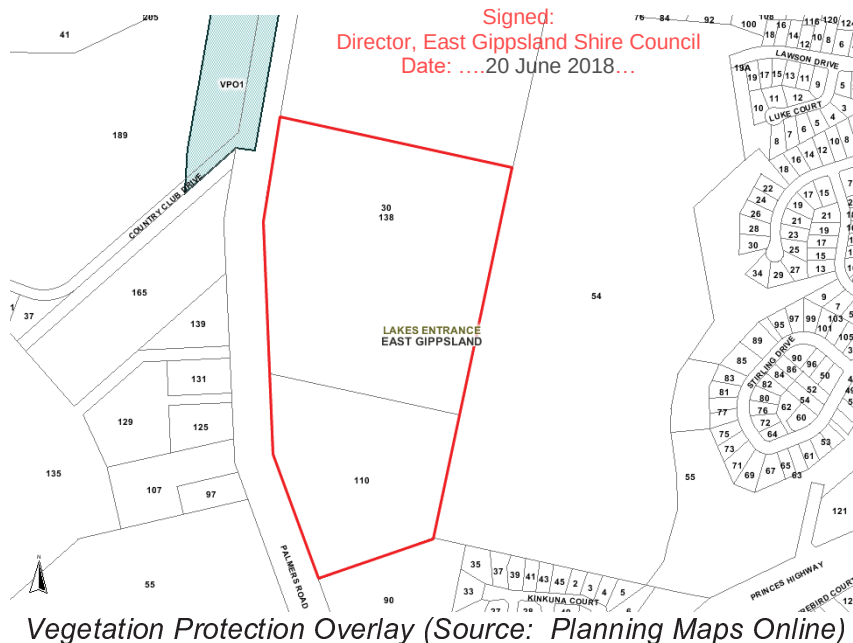
(L) Development Contributions Plan Overlay; (R) Development Plan Overlay
(Source: Planning Maps Online)

Amendment C112 also applied an Environmental Audit Overlay to all land within 500 metres of the Municipal Landfill. This Overlay therefore impacts only that portion of the subject land included within the Farming Zone – Schedule 3.

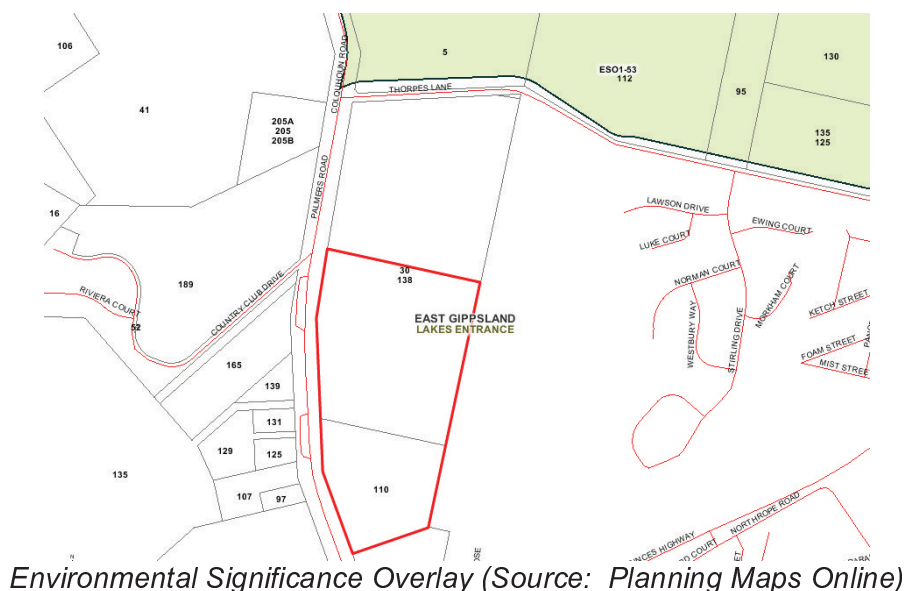


Environmental Audit Overlay (Source: Planning Maps Online)

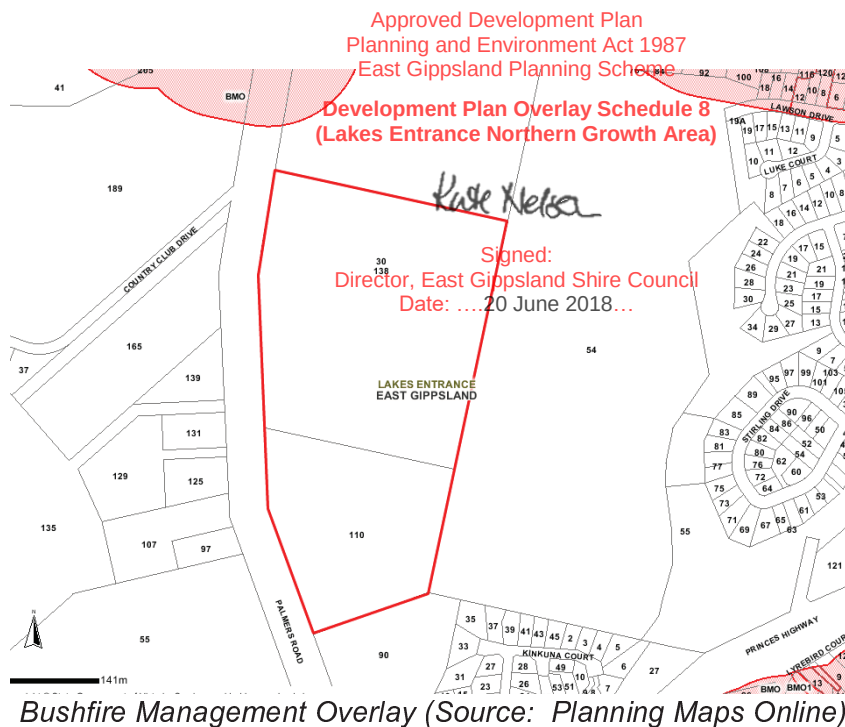
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The Vegetation Protection Overlay – Schedule 1 (Tambo-Bairnsdale Roadside Vegetation Protection Network) applies to part of the western alignment of Palmers Road, but has not been applied to the roadside adjoining the subject land.



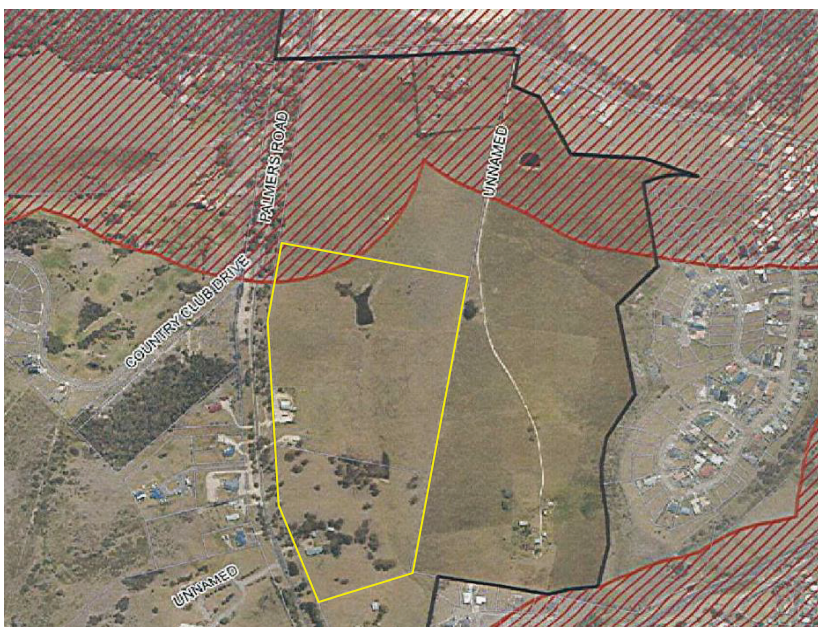
Similarly, the Environmental Significance Overlay – Schedules 1-53 apply to land directly to the north, but this Overlay has not been applied to the subject land.



More recently, Planning Scheme Amendment GC13 was gazetted on 3 October 2017 which introduced revised mapping for the Bushfire Management Overlay which indicates the subject land is not impacted by the Bushfire Management Overlay.



We note Amendment C112 had anticipated part of the subject land would be impacted once mapping for the Bushfire Management Overlay was updated, with Council engaging GHD to investigate the potential impacts. The *LENGA Bushfire Study* (August 2013) adopted an 'Assumed BMO' which anticipated a much greater impact on the subject land.



C112 Assumed BMO, with subject land highlighted in yellow
(Source: LENGA Bushfire Study)

The subject land, as with the broader LENGA precinct, enjoys limited provision with respect to existing open space, bicycle and pedestrian networks. There are no footpaths developed within proximity of the subject land, with pedestrian and cycling movements in the precinct occurring principally along road verges.

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Development Plan Overlay Schedule 8
(Lakes Entrance Northern Growth Area)

The subject land has been earmarked as the location for a passive open space reserve approximately 1 hectare in area. For active recreation purposes the subject land is reliant upon existing provision within the town including the Aquadome, Football/Cricket oval, Netball courts, Tennis Courts, Bowls Club, Surf Club and foreshore environs. Extension of social infrastructure to accommodate the needs of LENGA residents was anticipated by Amendment C112, with the apportionment of costs associated with improved infrastructure forming part of the Development Contributions Plan as adopted by Council.

Signed:
Director, East Gippsland Shire Council
Date: 20 June 2018

Approved Development Plan
Planning and Environment Act 1987
East Gippsland Planning Scheme
Development Plan Overlay Schedule 8
(Lakes Entrance Northern Growth Area)

3. Proposed Lot and Layout Pattern

3.1 Proposed Development Plan

Kate Nelson

A Proposed Development Plan (Figure 4) has been prepared for the broader holding including the adjacent allotment to the north currently held by the proponent. This conceptual development details a multi lot subdivision which will provide for the creation of 162 residential allotments, of which 159 will be vacant for future residential development, together with a reserve network which will incorporate appropriate buffers from the designated waterway, together with the area earmarked for passive recreation.

The scheme of subdivision has been devised with a longer-term view, and presumes that clarification will be provided following the closure of the Municipal Landfill, which will result in the entire property being rezoned for residential purposes. It is acknowledged that this will require further strategic work and Departmental support, and that until such time as the land is rezoned and the Environmental Audit Overlay removed, residential development may not be considered.

This broader, holistic view is considered to be entirely appropriate given the reliance upon the northern portion of the subject land for access from Palmers Road to the adjacent residential land to the east.

We confirm the Development Plan is provided for indicative purposes only, and expect that in the event the zoning of the northern portion of the subject land is changed to enable residential development, that further Council approval will be required.

3.2 Proposed Subdivision Layout

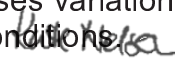
The Proposed Subdivision Plan (Version 3) (Figure 5) depicts the extent of subdivision that is able to occur under existing Planning Scheme controls, subject to the grant of a Planning Permit.

Two larger lots are proposed, each of which will contain an existing dwelling. The proposed vacant residential allotments vary in size and scale, with approximate areas ranging between 684m² and 1,997m². The average lot size proposed for the vacant lots is 1,029.9m², which is only slightly larger than that nominated by the LENGA ODP for conventional density housing, being 880m² (p.26).

The subdivision layout represents an appropriate response to the layouts proposed by Development Plans considered by Council for land to the west (189 Palmers Road) and the east (54 Thorpes Lane), demonstrating respect for both the established and preferred neighbourhood character for the precinct.

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Planning and Environment Act 1987
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(Lakes Entrance Northern Growth Area)

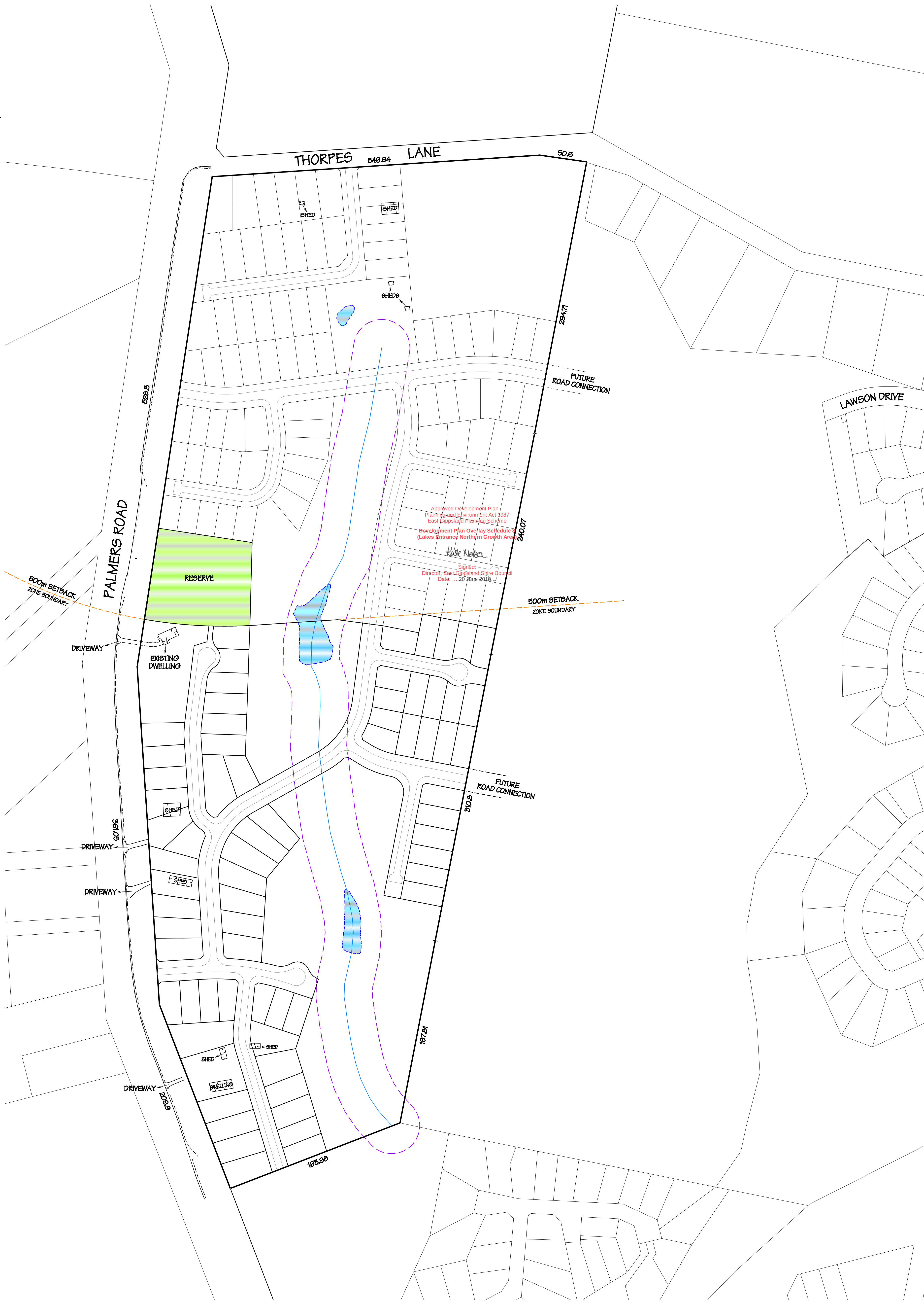
Lots have been designed with varying dimensions to ensure appropriate solar access, and to maximise expansive southerly ocean views where achievable. The scheme of subdivision also proposes variation in the width of lot frontages in response to the prevailing ground conditions.



The subdivision layout as designed provides opportunity for a range of housing types and design opportunities, offering diversity and choice for the market, and ensuring consistency with the Lenga ODP.

Signed:
Director, East Gippsland Shire Council
Date: 20 June 2018

MGA94, ZONE 55



110-138 PALMERS ROAD, LAKES ENTRANCE

Crowther & Sadler Pty. Ltd.

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SCALE (SHEET SIZE A3)

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SURVEYORS REF.

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VERSION 2 - DRAWN 01/05/2018

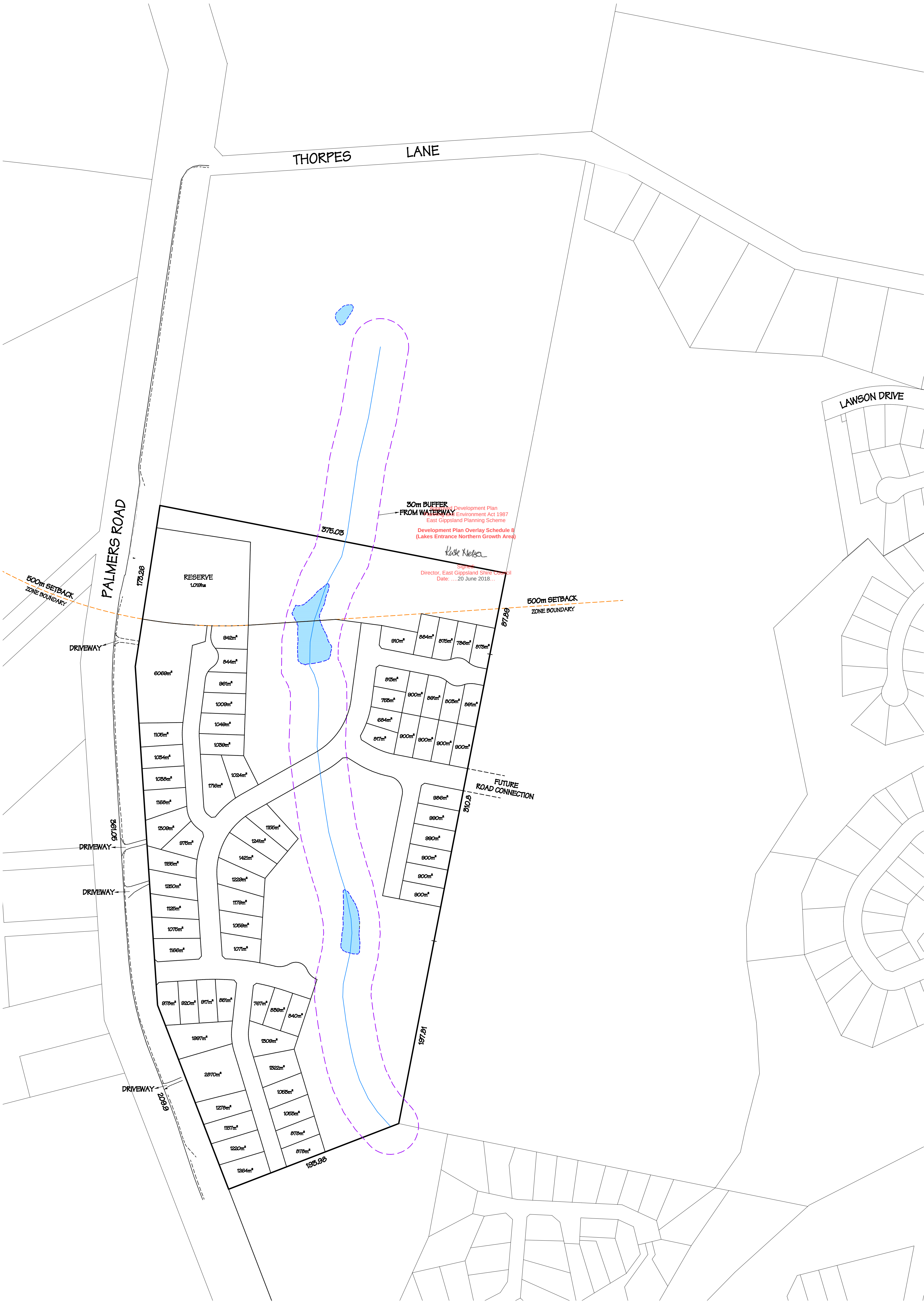
NOTATIONS

AREAS ARE APPROXIMATE ONLY
DIMENSIONS ARE SUBJECT TO SURVEY

PROPOSED DEVELOPMENT PLAN

PARISH OF COLQUHOUN
CROWN ALLOTMENTS 125 & (PART) 26A

TP282593D
LOT 2 - P5505056



50m BUFFER
FROM WATERWAY
Development Plan
Environment Act 1987
East Gippsland Planning Scheme
Development Plan Overlay Schedule 8
(Lakes Entrance Northern Growth Area)
Kase Nelson
Director, East Gippsland Shire Council
Date: ...20 June 2018...

110 - 138 PALMERS ROAD, LAKES ENTRANCE

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SCALE (SHEET SIZE A3)

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SURVEYORS REF.

17400

VERSION 4 - DRAWN 10/05/2018

NOTATIONS

AREAS ARE APPROXIMATE ONLY
DIMENSIONS ARE SUBJECT TO SURVEY

PROPOSED SUBDIVISION

PARISH OF COLQUHOUN
CROWN ALLOTMENTS 125, 126
& (PART) 26A

TP282593D
LOT 2 - PS505056

Approved Development Plan
Planning and Environment Act 1987
East Gippsland Planning Scheme

3.3 Staging of the Development

Development Plan Overlay Schedule 8
(Lakes Entrance Northern Growth Area)

A Staging Plan (Version 4) (Figure 10) has been prepared which reflects the intention to develop the subject land in a staged manner, with a total of six stages proposed.

Signed:
Director, East Gippsland Shire Council

The Staging Plan anticipates the initial stage of subdivision being a two lot subdivision to create an allotment for the most recently constructed dwelling, located centrally along the frontage to Palmers Road. Stage 1 will also facilitate the creation of a Reserve for passive recreation in accordance with the LENGA ODP.

The creation of a smaller lot for this existing dwelling is the primary purpose for the preparation of the Development Plan, to enable financial separation of this dwelling from the balance of the property. With an area of 6,069m², the smaller allotment retains the ability for further subdivision, however this is not anticipated by the current Development Plan. Given this allotment will remain affected by the provisions of the Development Plan Overlay, any re-subdivision beyond that anticipated herein will be subject to a separate Planning process.

Following the completion of Stage 1, the residential development is anticipated to proceed in 5 stages.

Stage 2, being the first stage of vacant residential development, will create 16 vacant residential lots and will require the construction of an intersection with Palmers Road, a section of connector road and two smaller sections of road. The first section of the drainage reserve network will also be created, which will include the area earmarked for RB9.

Stage 2 will also create a section of road reserve representing the balance of the connector road alignment, extending in an easterly direction across the site to the eastern boundary, that will vest with Council in an un-constructed state. The vesting of this road reserve at a relatively early stage is considered to provide certainty to both Council and adjoining properties that a vehicular connection from Palmers Road in the west through to the adjacent property to the east is achievable.

This reflects the outcome anticipated by Council as part of the Council resolution dated 4 July 2017 which endorsed a Development Plan and Development Contributions Plan for land located at 90 Palmers Road, 110 Palmers Road and 138 Palmers Road, Lakes Entrance relating to the *Access Assessment – Development East of Palmers Road – Lakes Entrance Northern Growth Area (July 2016)* prepared by Cardno. The Council Resolution also formalised an arrangement for Council to accept Developer Contributions from those immediately affected properties (including the subject land) towards the construction of the intersection and bridge culverts associated with the development of the connector road. This mechanism, together with the early vesting of the road reserve provides Council with the ability to commence

Approved Development Plan
Planning and Environment Act 1987
East Gippsland Planning Scheme
Development Plan Overlay Schedule 8
(Lakes Entrance Northern Growth Area)

construction of the connector road should demand from adjoining properties exceed that of the proponent for development.

Stage 3 will facilitate further construction of the connector road (unless commenced prior by Council), construction of a new cul-de-sac to access road standard, and 17 vacant residential lots.

Signed:
Director, East Gippsland Shire Council
Date:20 June 2018...

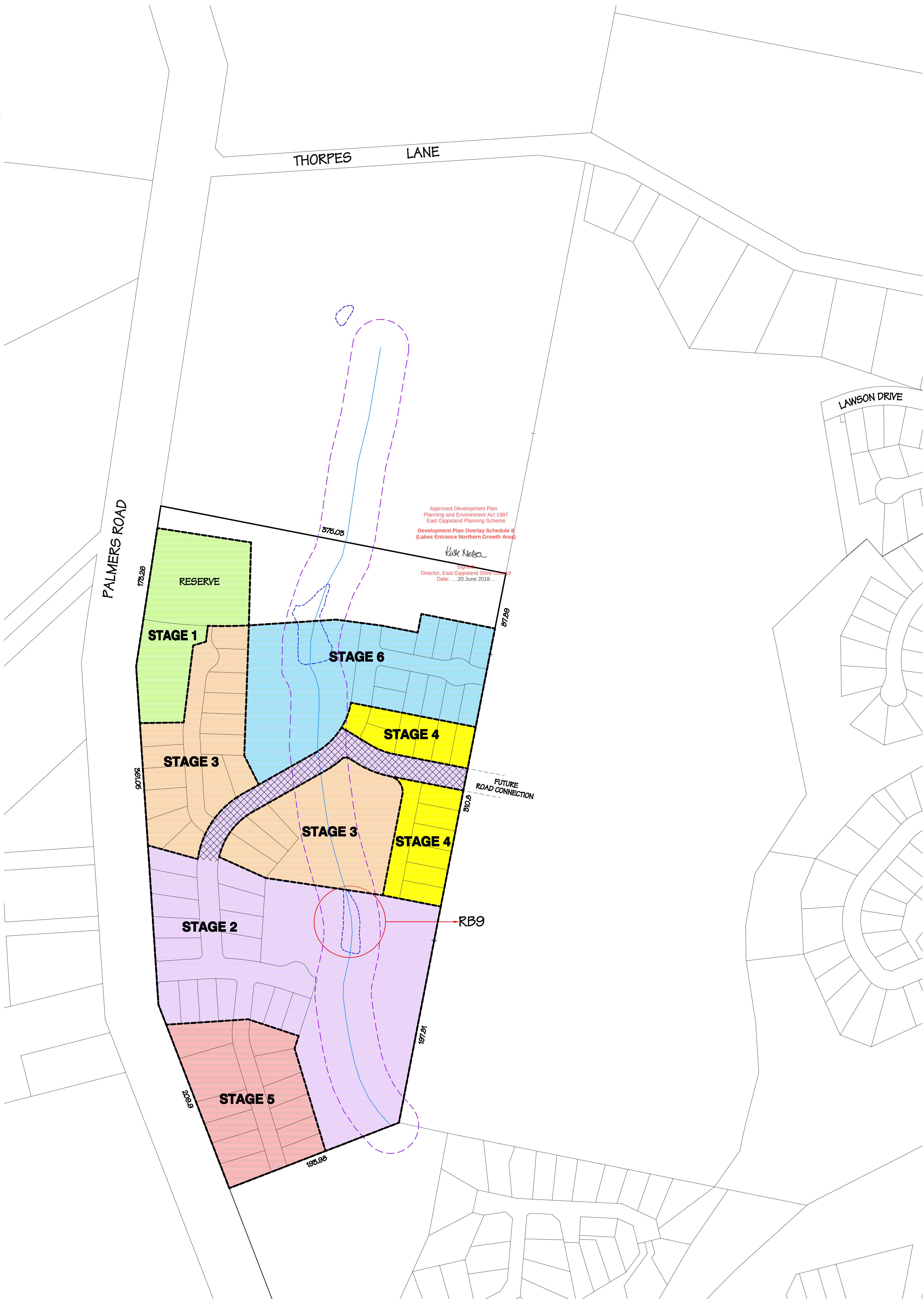
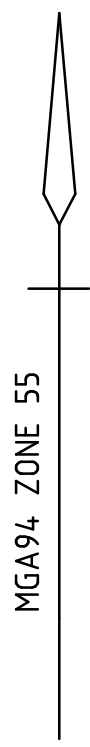
Stage 4 will complete the construction of the connector road through to the eastern boundary (unless otherwise completed) to facilitate future connection to the adjoining estate, provide an additional section of the drainage reserve to the north, and create 12 vacant residential lots.

Stage 5 represents the southernmost extent of the development and will create a lot for the existing dwelling, 11 vacant allotments, and an access street through to the southern boundary to provide opportunity for connection to the adjacent property to the south.

Stage 6 represents the final stage of subdivision utilising land currently zoned for residential purposes. This stage will create 11 vacant allotments.

The development of the balance of the subject land may only proceed once the underlying zoning is changed, and matters relating to the municipal landfill and associated 500 metre buffer have been resolved.

Development Contributions Levy payments will be required for each stage of development, to be calculated on a Net Developable Area basis. In accordance with Clause 45.06-1 of the Development Contributions Plan Overlay, it expected that payment of levies calculated proportionately for each stage will be required prior to the issue of Statement of Compliance.



Approved Development Plan
Planning and Environment Act 1987
East Gippsland Planning Scheme
Development Plan Overlay Schedule 8
(Lakes Entrance Northern Growth Area)

Kate Nelson
Significant
Director, East Gippsland Shire Council
Date: ...20 June 2018...

FUTURE
ROAD CONNECTION

RB9

110-138 PALMERS ROAD, LAKES ENTRANCE

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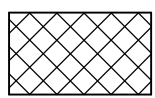
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SURVEYORS REF.

17400

VERSION 4 - DRAWN 10/05/2018

NOTATIONS



- DENOTES CREATION OF ROAD
RESERVE ONLY. NO CONSTRUCTION
PROPOSED AT STAGE 2.

STAGING PLAN

FARISH OF COLQUHOUN
CROWN ALLOTMENTS 125 & (PART) 26A

TP282593D
LOT 2 - P5505056

Approved Development Plan
Planning and Environment Act 1987
East Gippsland Planning Scheme

3.4 Proposed Road Hierarchy

Development Plan Overlay Schedule 8
(Lakes Entrance Northern Growth Area)

A Road Hierarchy Plan (Figure 4) has been prepared which proposes the construction of all new roads to a standard which will either meet or exceed the requirements of the LENGA ODP.

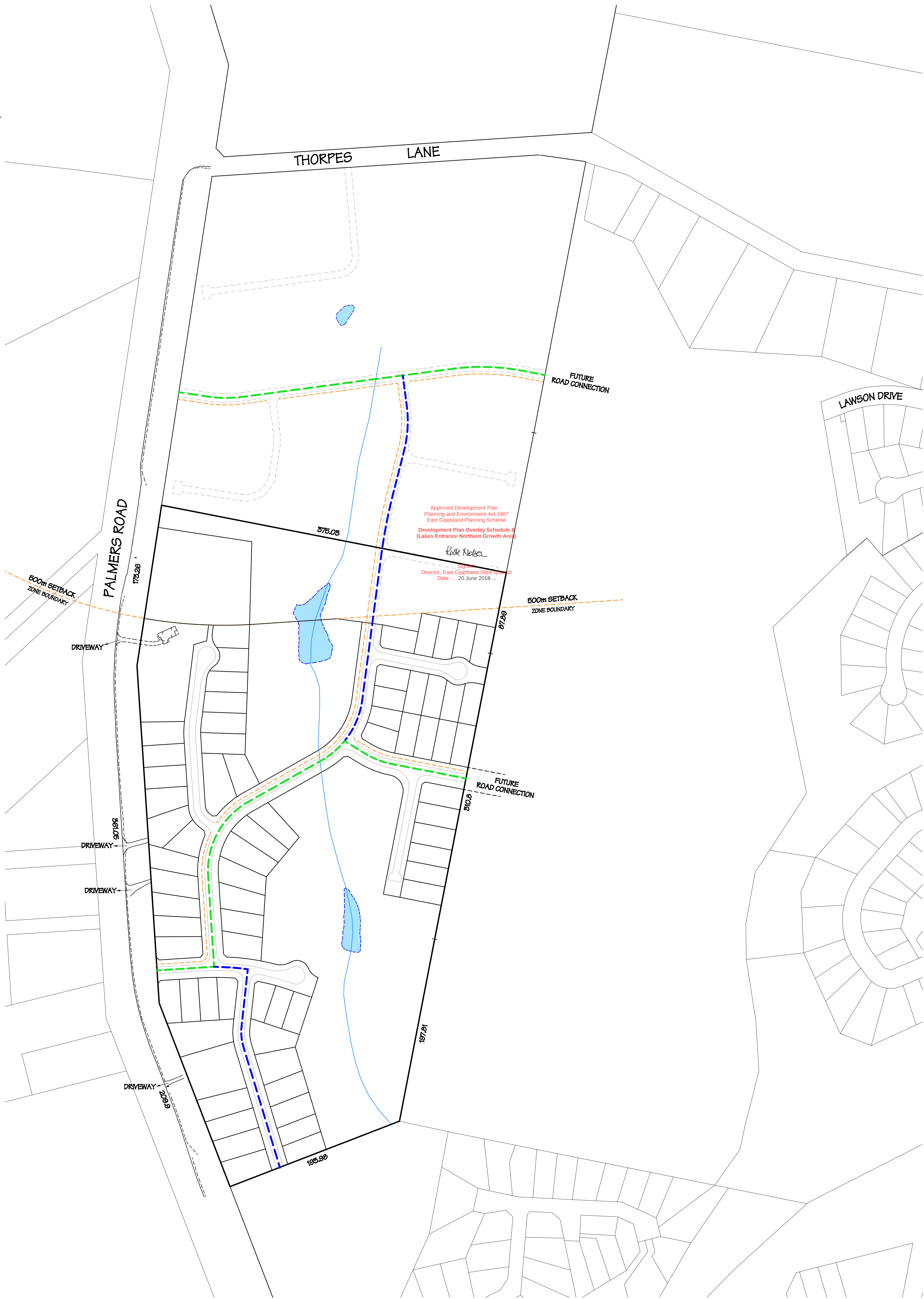
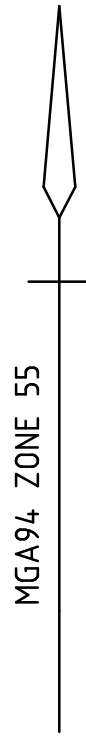
Signed:
Director, East Gippsland Shire Council
Date: 20 June 2018

Two Connector Streets are proposed, providing connection between Palmers Road to the west and the Merrangbaur Heights Estate to the east. This is entirely consistent with the LENGA ODP, and reflects the Development Plan submitted for the adjacent property to the east. It is noted that the northernmost Connector Street is located within land currently unavailable for residential development, and is therefore shown for indicative purposes only.

All other roads are proposed to Access Street standard, with generous road reserves proposed which reflect the undulating topography of the site. All road reserves are sufficiently designed to accommodate carriageway widths and footpath provision consistent with the minimum specifications of Table 7 and Figure 4 of Section 6.4 of the LENGA ODP.

The Development Plan does not restrict the ability for properties to the south to be developed, with appropriate provision made for future road connection (by others) as anticipated by the LENGA ODP.

No roads are required to be constructed to facilitate the completion of Stage 1, with the existing dwelling able to rely upon established access provisions to Palmers Road.



110-138 PALMERS ROAD, LAKES ENTRANCE

Crowther & Sadler Pty. Ltd.

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FILENAME: N:\Jobs\17000-17999\17400-17499\17400 Gullio\17400 Road Hierarchy V2.pro

SCALE (SHEET SIZE A1)

1 : 2000

SCALE (SHEET SIZE A3)

1 : 4000

SURVEYORS REF.

17400

VERSION 2 - DRAWN 01/05/2018

LEGEND

- CONNECTOR ROAD
- ACCESS STREET
- SHARED PATH

ROAD HIERARCHY PLAN

FARISH OF COLQUHOUN
CROWN ALLOTMENTS 125 & (PART) 26A

TP282593D
LOT 2 - P5505056

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East Gippsland Planning Scheme

3.5 Public Open Space

Development Plan Overlay Schedule 8
(Lakes Entrance Northern Growth Area)

The LENGA ODP nominates the subject land as a site for an area of passive open space approximately 1 hectare in area. The LENGA ODP shows a square area approximately 100 metres by 100 metres located to the west of the main drainage line, north of the southern connector road, and outside the area impacted by the Environmental Audit Overlay.

We consider the placement of this 'square' was a desktop exercise that had no regard for the prevailing ground conditions, and would deliver an area of public space with limited functionality.

Having regard for the spatial requirement specified by the LENGA ODP, we have reviewed the placement of the proposed 'square' with the intention of providing a more useable area that is better located to service the broader resident population, whilst remaining 'generally in accordance' with the ODP as adopted by Council.

The Proposed Development Plan, as shown at Figure 4 provides for a more generously proportioned area of passive open space that will be easily accessible for residents within the subject land, as well as being directly accessible from Palmers Road to the west.



Extract from Proposed Development Plan, with approximate area available for passive open space shown in green

The LENGA ODP and Development Contributions Plan include provision for the future development of a Playground within the proposed Reserve, to be funded by the Community Infrastructure Levy.

The shared pathway network proposed by the LENGA ODP (Plan 8, p.25) includes the subject land in part, with shared paths proposed to adjoin connector roads, as well as running parallel to the drainage line, with a path to be constructed within the ecological buffer adjacent to the waterway. The shared path adjacent to the waterway will continue beyond the subject land in a southerly direction.

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Planning and Environment Act 1987
East Gippsland Planning Scheme
Development Plan Overlay Schedule 8
(Lakes Entrance Northern Growth Area)

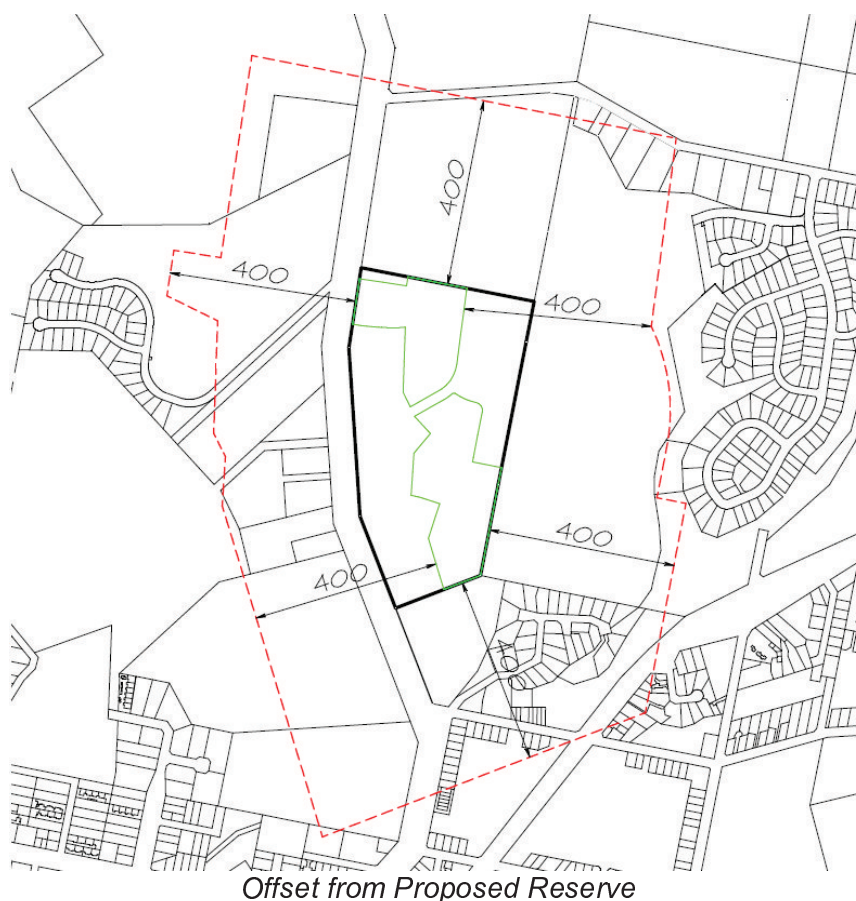
When applied to the Proposed Subdivision Plan for the subject land, a large extent of the proposed shared path network falls within the area currently sterilised pending the resolution of required buffer details relating to the Municipal Landfill. There is no intention to undertake any development within the portion of the site currently included within the Farming Zone, as any works within that area would be premature. The references to the subject land in its entirety within the LENGA ODP indicates Council's view that the highest and best use of the land is for residential purposes, subject to further investigation relating to the 500 metre buffer.

Signed:
Director, East Gippsland Shire Council
Date: 20 June 2018

The proposed development of the subject land will include the creation of a large reserve which will serve a range of purposes, including:

- Preservation and protection of the declared waterway;
- An ecological buffer adjoining the waterway for a distance of 30 metres either side; and
- Retention of mature remnant vegetation earmarked for protection within the Native Vegetation Precinct Plan.

The proposed Reserve is appropriately located to satisfy the LENGA ODP objective for open space to be located within 400 metres safe walking distance of all dwellings. The following diagram depicts a 400 metre offset from the proposed Reserve network, which easily encapsulates each of the proposed allotments.



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(Lakes Entrance Northern Growth Area)

A later section of this document will nominate requirements for the landscaping of the proposed Reserve, including the specifications for the ecological buffer adjacent to the waterway.

Kate Nelson

3.6 Bicycle and pedestrian path network

Signed:

Director, East Gippsland Shire Council
Date: 20/04/2018

The development of the subject land will provide improved opportunities for pedestrian and bicycle circulation, with a network of paths facilitating easy movement throughout the estate.

The Road Hierarchy Plan provided on page 26 of this document depicts road reserves containing sufficient width to accommodate the required footpath provision specified at Table 7 of the LENGA ODP.

The proposed shared trail will provide clear and legible access through the proposed Reserve, immediately adjacent to the waterway.

The proposed path network provides multiple opportunities for future connection to adjoining properties to the east and south as progressive development of the precinct occurs.

3.7 Land required for drainage purposes

The subject land performs an integral part of the drainage solution for the precinct based on the recommendations of the *LENGA Development Concept Plan Hydrology* prepared by Water Technology. Based on the sub-catchment classification provided at Figure 2-1 of the Water Technology report, the subject land represents part of sub-catchment 12, all of sub-catchment 13, and part of sub-catchment 14. The LENGA Development Contributions Plan describes these sub-catchments as forming Drainage Catchment E.

Three retarding basins are proposed to service these sub-catchments, two of which are contained within the subject land:

- RB8 is located within the Farming Zone parcel of land to the north of the subject land, just north of the zone boundary, meaning it will not be considered until such time as the land within the 500m landfill buffer has been rezoned ; and
- RB9 is located within the residentially zoned area, and appears to straddle the existing boundary between 110 and 138 Palmers Road.

All parts of the subject land required to be set aside to facilitate drainage for this catchment will be contained within the reserve network detailed on the Proposed Development Plan. The existing drainage line recognised as a declared waterway will continue to perform a localised drainage function, with the establishment of an ecological buffer of 30 metres either side of the waterway expected to deliver positive outcomes with respect to water quality.

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Development Plan Overlay Schedule 8
(Lakes Entrance Northern Growth Area)

Costs associated with establishing appropriate drainage infrastructure have been apportioned throughout the Lenga with a variable levy for drainage forming part of the Lenga Development Contributions Plan. It is expected the subdivision of the subject land will trigger the payment of levies, calculated on a Net Developable Area basis for each stage of development.

Signed:
Director, East Gippsland Shire Council
Date: 28 June 2018

The completion of Stage 1 will not require any change in drainage infrastructure arrangements, remaining reliant on infrastructure in place associated with the existing dwelling. Nonetheless, it is expected that a proportionate payment will be required towards the Drainage Levy component of the Development Contributions Plan.

3.8 Land provided for community services

The subject land does not include any areas earmarked for community services as nominated by either the Lenga ODP or the Lenga Social Impact Assessment. Accordingly, there is no requirement for any land to be set aside for community services.

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**Development Plan Overlay Schedule 8
(Lakes Entrance Northern Growth Area)**

4. Proposed Road Network

Development of the subject land in its entirety will involve the construction of an internal road network, accessed via a new intersection with Palmers Road to the west. Whilst the Overall Development Plan foreshadows additional intersections in the future, based on the Proposed Subdivision Plan for the subject land, only one intersection with Palmers Road will need to be constructed to facilitate the development of land currently zoned for residential purposes.

The LENGA ODP, at Table 5, Section 6.2 nominates the turn treatments required for this intersection as an Auxiliary Left and a Channelised Right (p.36). This intersection treatment will be funded via the separate Development Contributions scheme developed by Council in accordance with the Cardo Report and associated Council Resolution. It is acknowledged that the proponent will be required to contribute to this scheme, in addition to the levies payable under the LENGA Development Contributions Plan.

Given the existing road network will not require any changes to accommodate Stage 1 of the proposed development, it is respectfully requested that consideration of the road network be deferred for consideration prior to Stage 2, which will include the preparation of a Traffic Impact Assessment, and consideration of any recommendations.

5. Hydrology

The completion of Stage 1 of the proposed development will have no impact on existing hydrological conditions, with ground conditions to remain unchanged. Existing arrangements for the management of stormwater will be retained.

It is respectfully requested that matters relating to hydrology be deferred for consideration prior to the commencement of Stages 2 and beyond.

It is expected this will include, as a minimum, the preparation of a Hydrology Report to review the impact on flow paths, and will seek to ensure flood extents, flood levels and velocities are within the post-development conditions assumed by Water Technology in preparing the *Northern Growth Area Lakes Entrance Development Concept Plan Hydrology* (July 2012). A Stormwater Management Plan is another expected requirement. Both the Hydrology Report and Stormwater Management Plan will be required as part of the documentation required for Stage 2.

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6. Geotechnical Assessment

Development Plan Overlay Schedule 8
(Lakes Entrance Northern Growth Area)

A Geotechnical Risk Assessment has previously been prepared for the subject land by Simon Anderson Consultants to support a Planning Application for the Dwelling which is the focus of Stage 1. A copy of this Assessment is attached at Appendix C. The Assessment was informed by a field investigation which included taking a series of soil investigation bores for further analysis.

Analysis of soils found highly permeable topsoils which provide for rapidly draining surfaces with minimal run-off. The Assessment concluded the risk of landslide, sheet/rill erosion and tunnel erosion for the subject land to be low, and found the site suitable for the development as proposed. No further intensive investigation was deemed necessary.

There will be no increased risk of erosion associated with Stage 1 of the proposed subdivision, given that servicing and access provisions to the existing dwelling are existing, and no further ground disturbance will be required.

It is respectfully requested that the requirement for a Geotechnical Risk Assessment be deferred for consideration prior to the commencement of Stage 2 of the proposed subdivision.

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**Development Plan Overlay Schedule 8
(Lakes Entrance Northern Growth Area)**

7. Heritage Values

A desktop analysis has been undertaken to ascertain heritage values relating to the subject land.

Kate Nelson

7.1 Aboriginal Cultural Heritage

Signed:
Director, East Gippsland Shire Council

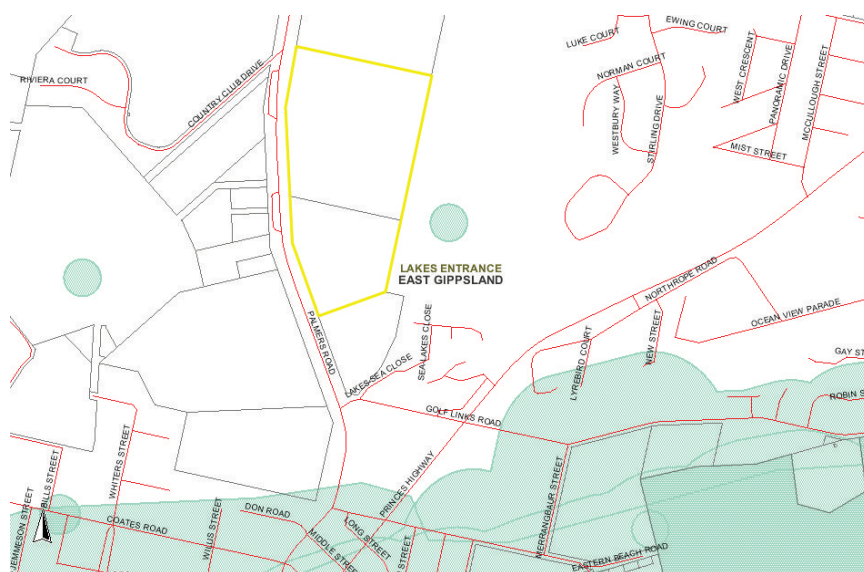
Date: 20 June 2018

Regulation 6 of the *Aboriginal Heritage Regulations 2007* requires a Cultural Heritage Management Plan be prepared for any Planning Application that involves a high impact activity on an area of cultural heritage sensitivity.

The subdivision of land into three or more lots constitutes a high impact activity as defined at Regulation 46 of the *Aboriginal Heritage Regulations 2007*.

The subject land is not mapped as an area of cultural heritage sensitivity as defined at Division 3, Regulations 22-38 (inclusive) of the *Aboriginal Heritage Regulations 2007*.

On that basis, the future subdivision of the subject land would not trigger the preparation of a Cultural Heritage Management Plan.



Extract from cultural heritage sensitivity mapping, with sensitive areas shown in green
(Source: Planning Maps Online)

7.2 Non-Indigenous Cultural Heritage

A review of the Heritage Overlay has confirmed there are no properties within the LENGA precinct affected by this Overlay.

The *East Gippsland Shire: Heritage Gaps Study* (Context, September 2005) ('East Gippsland Heritage Study') identifies the Lakes Entrance Garden Cemetery at 165 Palmers Road, Lakes Entrance as a place of potential significance. Palmers Road separates the subject land from this place of potential significance, therefore development of the subject land is unlikely to have any impact on the potential heritage values of the cemetery.

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Development Plan Overlay Schedule 8
(Lakes Entrance Northern Growth Area)

We understand that limitations in Council resourcing have prevented any further progress towards the actions recommended by the East Gippsland Heritage Study as recorded in minutes from the Ordinary Council Meeting held on 6 March 2007.

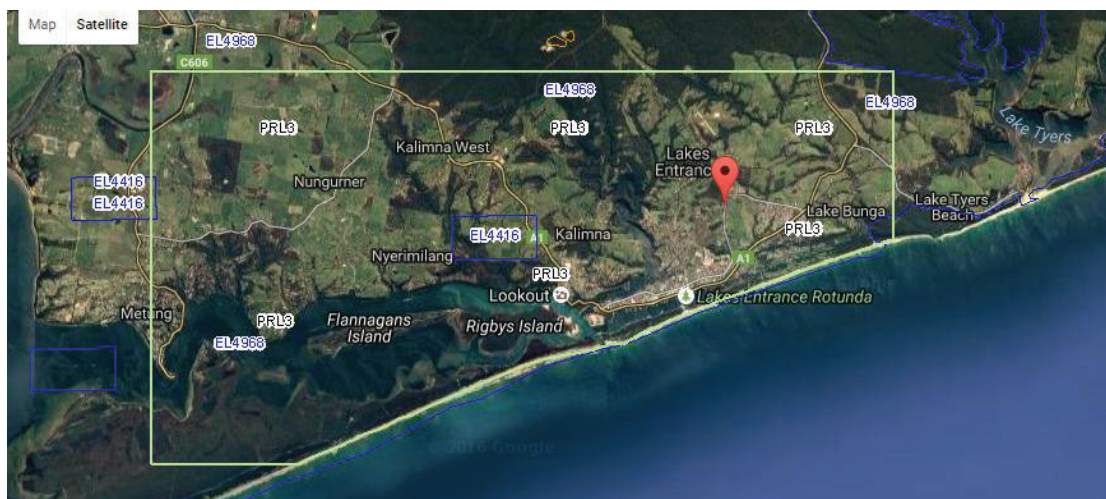
Kate Nelson

The township of Lakes Entrance, together with much of the land adjoining the coast from Golden Beach in the west to Lake Tyers in the east, is included within Exploration Licence EL4968. This Licence is held by Entrance Energy Ltd. and provide exploration rights for base metals, gold, mineral sands, platinum and silver, over an area of just under 2,000km².



Part of land included within Exploration Licence 4968 (Source: Geovic.vic.gov.au)

Lakes Entrance is also included within Onshore Petroleum Retention Lease PRL3, which covers an area of approximately 124km² from Metung in the west to Lake Bunga in the east. This Lease is owned by Petro Tech Pty. Ltd., with Lakes Oil Ltd. holding a 100% interest and will expire on 26 February 2017. We note the State Government has suspended all onshore petroleum exploration, with a moratorium preventing any such activities until 2020, providing opportunity for further studies to be undertaken, foreshadowing a permanent ban if risks to human health cannot be appropriately addressed.



The green line outlines the extent of PRL3 (Source: earthresources.vic.gov.au)

The East Gippsland Heritage Study provides an overview of historical exploration undertaken around Lakes Entrance.

0s, a number of bores were
l, as well as artesian water which
1940s and 1950s produced s
was highly successful and the v
signed
Date: 11:20 June 2018

[illegible]

The following information of the two wells was derived from the Department for Economic Development, Jobs Transport and Resources website (www.er-info.dpi.vic.gov.au/documentation):

The **Lake View 2** well was established by Lake View Oil Co. and was also first recorded on 31 December 1947. The well had a total depth of 409 metres, and is recorded to have shown a strong oil show. At its peak, this well is recorded to have produced 20 gallons of oil per day. The current status of the well is identified as plugged and abandoned, with no further remedial action required.

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7.3 Consideration of Heritage values

Development Plan Overlay Schedule 8
(Lakes Entrance Northern Growth Area)

Based on the review of likely heritage considerations relevant to the subject land, there are considered to be no values that warrant further protection or management.

Signed:
Director, East Gippsland Shire Council
Date:20 June 2018...

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8. Landscape Master Plan

Development Plan Overlay Schedule 8
(Lakes Entrance Northern Growth Area)

Landscaping of the proposed development will consist of the following:

- Street tree planting at a rate of ~~no less than~~ ^{at least} one tree per vacant lot proposed;
- Plantings associated with an ecological buffer adjoining each side of the declared waterway comprising a 10 metre wide core riparian zone with riparian vegetation, with a further 20 metre wide outer zone planted with ground covers, sedges and grasses; and
- Retention and enhancement of remnant vegetation identified for protection within the Native Vegetation Precinct Plan.

Signed:

Director, East Gippsland Shire Council

Date: 20 June 2018

The following comments provide a direct response to the items specified at Clause 3.1 to a Landscape Master Plan.

8.1 Safe and friendly streets

The development has been designed to deliver a network of connected and cohesive streets and public spaces where residents feel safe. The design provides for strong surveillance of the proposed Reserve network which enjoys substantial frontages at multiple points to the proposed road network.

The curvilinear street design assists in slowing traffic, promoting pedestrian safety. Proposed street tree plantings will line the streets to soften the hard edge associated with wide concrete footpaths adjoining both sides of the proposed road network.

The undulating topography of the Reserve including the drainage line and complimentary riparian plantings within the ecological buffer will provide interest and promote opportunities for passive enjoyment of the space.

8.2 Entrance treatment and features

We respectfully request that consideration of entrance treatment and features be deferred for consideration following the completion of Stage 1.

It is expected that any form of entry statement would be discrete and well set back from the intersection with Palmers Road, ensuring there will be no impact on the safety of the intersection, and would be of a form that would avoid the imposition of an ongoing maintenance burden on Council.

8.3 Planting themes

It is respectfully requested that consideration of landscaping detail be deferred for consideration in association with Stages 2 and beyond.

It is expected that future landscaping will take direction from the ecological vegetation class as applying, and will utilise similar or complimentary species to the relevant benchmark species.

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Development Plan Overlay Schedule 8
(Lakes Entrance Northern Growth Area)

We note that the final selection and mix of species will be determined to the satisfaction of the Responsible Authority and will be entirely dependent upon availability and suitability. It is expected a Landscape Master Plan will be prepared as part of the suite of documents submitted for Stage 2.

8.4 Tree Planting schedule

Signed:
Director, East Gippsland Shire Council
Date:20 June 2018....

Street trees will be established throughout the site to deliver a cohesive streetscape theme, at a rate of one tree per residential lot proposed. Appropriate planting techniques will be utilised to assist the trees to establish, including installing tree guards and/or stakes, and mulching of disturbed soils.

The following species list is taken from Council's Preferred Tree Species document but is by no means exhaustive. Final selection and mix of species to be utilised within the streetscape will be dependent upon availability and suitability.

Scientific Name	Common Name	Height	Width
<i>Acacia boormanii</i>	Snowy River Wattle	4	3
<i>Acacia caerulescens</i>	Limestone Blue Wattle	-	-
<i>Acacia cognate</i>	Narrow-leaf Bower	5	3
<i>Acacia floribunda</i>	Gossamer	3	3
<i>Acacia howittii</i>	Sticky Wattle	5	5
<i>Acacia implexa</i>	Lightwood	10	5
<i>Acacia longifolia</i>	Sallow Wattle	5	4
<i>Acacia melanoxylon</i>	Blackwood	6-30	3-15
<i>Acacia pynantha</i>	Golden Wattle	3-8	2-4
<i>Acmena smittii</i>	Lilly-pilly	8-30	
<i>Allocasuarina littoralis</i>	Black She-oak	9	5
<i>Allocasuarina strict</i>	Drooping She-oak	8	4
<i>Angophora floridunda</i>	Rough-barked Angophora	20	10
<i>Banksia ericifolia</i>	Heath Banksia	4	3
<i>Banksia marginate</i>	Silver Banksia	5	3
<i>Banksia integrifolia</i>	Coast Banksia	4-20	
<i>Banksia serrata</i>	Saw Banksia	8	5
<i>Banksia spinulosa</i>	Hairpin Banksia	4	3
<i>Brachychiton populeneus</i>	Kurrajong	5-10	
<i>Callistemon citrinus</i>	Crimson Bottlebrush	3	3
<i>Callistemon pallidus</i>	Lemon Bottlebrush	4	3
<i>Callistemon subulatus</i>	Dwarf Bottlebrush	1.5	
<i>Callistemon sieberi</i>	Alpine Bottlebrush	1-3	
<i>Callitris columellaris</i>	White Cypress-pine	7-25	
<i>Callitris endlicheri</i>	Black Cypress-pine	5-15	
<i>Callitris rhomboidea</i>	Port Jackson Pine	2-6	
<i>Corymbia maculate</i>	Spotted Gum	40	20
<i>Eucalyptus bosistoana</i>	Coast Grey Box	25-45	
<i>Eucalyptus elata</i>	River Peppermint	20-45	

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East Gippsland Planning Scheme

Scientific Name	Common Name	Height	Width
<i>Eucalyptus mellidora</i>	Yellow Box	12-30	
<i>Eucalyptus neglecta</i>	Omeo Gum	5-9	
<i>Eucalyptus polyanthemos</i>	Red Box	7-25	
<i>Eucalyptus albens</i>	White Box	8-24	
<i>Eucalyptus tricarpa</i>	Ironbark	10-30	
<i>Eucalyptus tereticornis</i>	Forest Red Gum	20-45	
<i>Hakea eriantha</i>	Tree Hakea	3-8	
<i>Hakea sericea</i>	Silky Hakea	3	2
<i>Leptospermum grandifolium</i>	Mountain Tea-tree	2-4	
<i>Leptospermum laevigatum</i>	Coast Tea-tree	2-8	
<i>Lomatia fraseri</i>	Tree Lomatia	7	4
<i>Melaleuca armillaris</i>	Giant Honey-myrtle	2-14	
<i>Melaleuca ericifolia</i>	Swamp Paperbark	2-9	
<i>Melaleuca squarrosa</i>	Scented Paperbark	3-6	4
<i>Melaleuca stypheloides</i>	Prickly Paperbark	8-10	5
<i>Myporum insulare</i>	Boobialla	5	3
<i>Pittosporum undulatum</i>	Sweet Pittosporum	4-14	
<i>Tristania laurina</i>	Kanooka	5-20	

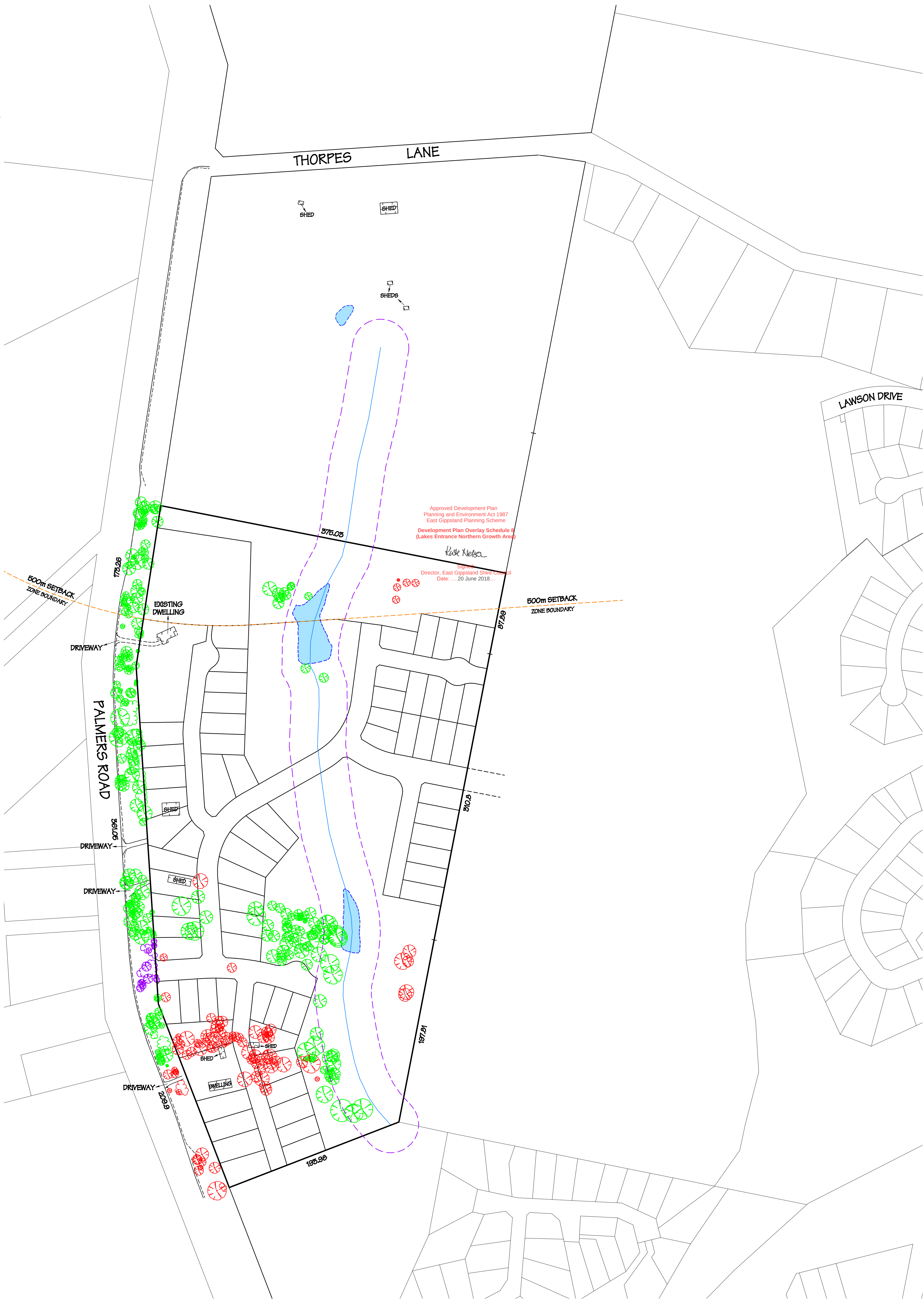
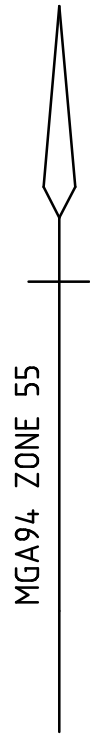
8.5 Native Vegetation

The LENGA Native Vegetation Precinct Plan ('NVPP') applies to the subject land and provides direction on those species which may or may not be removed in accordance with the provisions of Clause 52.16.

There is no consideration of native vegetation required to facilitate Stage 1 of the development, as no vegetation removal is proposed. We respectfully request further consideration of native vegetation be deferred for consideration prior to the commencement of Stages 2 and beyond.

Native vegetation has been a key consideration in designing the proposed subdivision. The large Reserve network which runs through the centre of the subject land seeks to preserve and enhance the integrity of the declared waterway, and will retain all vegetation earmarked within the NVPP for protection. A Vegetation Plan (Figure 8) depicts the location of all vegetation on site, with individual species colour coded to reflect their status within the NVPP (where identified), and the significant roadside vegetation to be retained.

The Vegetation Plan also provides an indication of a limited area of vegetation which may need to be removed to facilitate the construction of the intersection with Palmers Road identified in both the LENGA ODP and the *Access Assessment – Development East of Palmers Road – Lakes Entrance Northern Growth Area* (July 2016) prepared by Cardno. Detailed design of this intersection will provide clarification in the future.



110-138 PALMERS ROAD, LAKES ENTRANCE

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FILENAME: N:\Jobs\17000-17999\17400-17499\17400 Gullio\17400 Veg Plan V2.pro

SCALE (SHEET SIZE A1)

1 : 2000

SCALE (SHEET SIZE A3)

1 : 4000

SURVEYORS REF.

17400

VERSION 2 - DRAWN 01/05/2018

NOTATIONS



SCATTERED TREES IDENTIFIED IN NVPP
TO BE REMOVED



SCATTERED TREES IDENTIFIED IN NVPP
TO BE RETAINED



INDICATIVE AREA OF SIGNIFICANT VEGETATION
TO BE REMOVED FOR ROADS

VEGETATION PLAN

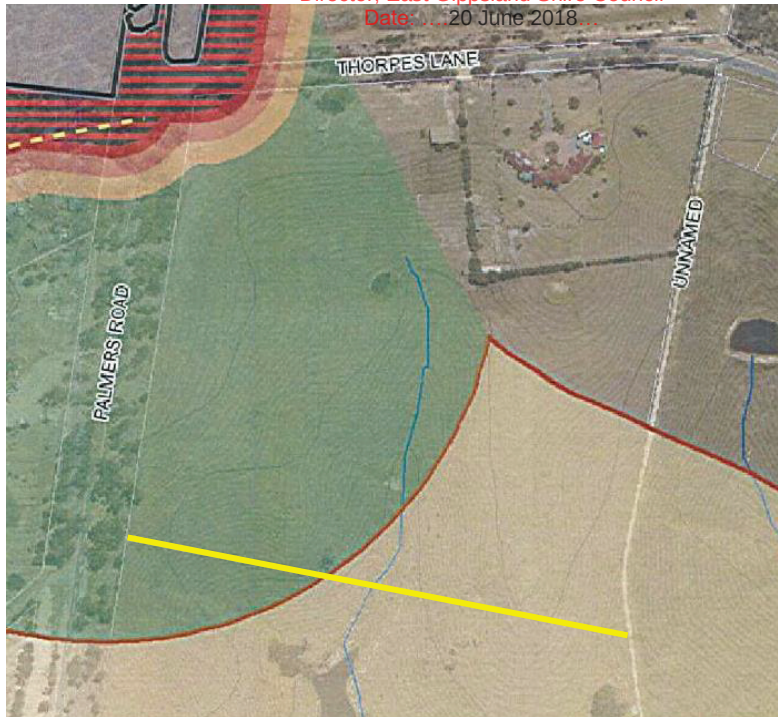
PARISH OF COLQUHOUN
CROWN ALLOTMENTS 125 & (PART) 26A

TP282593D
LOT 2 - P5505056

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Planning and Environment Act 1987
East Gippsland Planning Scheme
Development Plan Overlay Schedule 8
(Lakes Entrance Northern Growth Area)

Vegetation management associated with the provision of defensible space is not proposed. The *Lakes Entrance Northern Growth Area Bushfire Study* (GHD, 2013) adopted an Assumed BMO which had a greater impact on the subject land than that which transpired through the updated BMO mapping delivered by Amendment GC13.

Signed:
Director, East Gippsland Shire Council
Date: 20 June 2018



Modelled BAL zones for the subject land, with BAL 12.5 (shown in green) nominated for the bulk of the modelled area, and the northern boundary of the subject land shown as a yellow line (Source: Map 3, LENGA Bushfire Study)

Whilst the recommendations of the LENGA Bushfire Study now have limited relevance to the subject land, importantly no requirements were specified for the ongoing management of vegetation within the subject land for the purposes of establishing and maintaining defensible space.

On balance the proposed development strikes an appropriate balance between the retention of vegetation for biodiversity values and the level of residential growth anticipated by LENGA.

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9. Flora and Fauna Assessment

Development Plan Overlay Schedule 8
(Lakes Entrance Northern Growth Area)

The subject land was included within the *LENGA Biodiversity Assessment Report* (EGSC, November 2012). The objectives for this Report included the identification, assessment and mapping of significant flora, fauna and habitat in the precinct, to ensure the development of the precinct is able to comply with legislative and policy requirements relating to the protection of indigenous flora and fauna species and communities (p.6).

This Report noted the presence of numerous scattered trees of either medium or low conservation significance, many located within proximity of the drainage land which dissects the property.

There were no Habitat Zones identified within boundaries of the subject land, however a number of Habitat Zones were nominated adjacent to the western boundary within the Palmers Road road reserve. These Habitat Zones were identified as comprising either Limestone Box Forest or Lowland Forest Ecological Vegetation Class.

The recommendations of the Report relating to the subject land are deemed to be enshrined within the LENGA NVPP, which in turn has established the parameters for the retention of those scattered trees of environmental significance.

There are no issues that warrant detailed consideration prior to the commencement of the first stage of subdivision proposed for the subject land. If Council determines further analysis is required, we respectfully request such requirements be deferred for consideration at Stages 2 and beyond.

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East Gippsland Planning Scheme

10. Waterway Management

Development Plan Overlay Schedule 8
(Lakes Entrance Northern Growth Area)

The existing drainage line which courses through the subject land is identified as a declared waterway under the Water Act 1989.

The integrity of this waterway has been preserved and enhanced by the proposed scheme of subdivision, with a 30 metre wide ecological buffer proposed either side of the waterway in accordance with the requirements of the LENGA ODP (p.44).

Signed:
Director, East Gippsland Shire Council
Date: 20 June 2018

This buffer will be comprised of two zones:

- i. The initial ten metres either side of the waterway will be established as a core riparian zone, and will be planted with riparian vegetation consistent with the applicable EVC.
- ii. For a distance of twenty metres beyond the core riparian zone, an outer zone will be planted with ground covers, sedges and grasses consistent with the applicable EVC.

A review of the DELWP Interactive Maps indicates the waterway is located within *EVC 16: Lowland Forest* of the Gippsland Plain Bioregion. The following species list outlines benchmark species for EVC 16 but is by no means exhaustive. Final selection and mix of species to be utilised within the ecological buffer will be dependent upon availability and suitability.

Life form	Scientific Name	Common Name
Trees	<i>Allocasuarina littoralis</i>	Black Sheoak
	<i>Acacia mearnsii</i>	Black Wattle
	<i>Acacia implexa</i>	Lightwood
	<i>Acacia melanoxylon</i>	Blackwood
	<i>Eucalyptus bosistoana</i>	Coast Grey Box
	<i>Eucalyptus bridgesiana</i>	Apple Box or But But
	<i>Eucalyptus cephalocarpa</i>	Mealy Stringybark
	<i>Eucalyptus consideniana</i>	Yertchuk
	<i>Eucalyptus globoidea</i>	White Stringybark
	<i>Eucalyptus melliodora</i>	Yellow Box
	<i>Eucalyptus obliqua</i>	Messmate
	<i>Eucalyptus ovata</i>	Swamp Gum
	<i>Eucalyptus polyanthemus</i>	Red Box
	<i>Eucalyptus tereticornis ssp. Mediana</i>	Gippsland Red Gum

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Life form	Scientific Name	Common Name
Shrubs	<i>Acacia melanoxylon</i> <i>Acacia brownie</i> <i>Acacia genistifolia</i> <i>Acacia oxycedrus</i> <i>Acacia ulicifolia</i> <i>Acrotriche serrulata</i> <i>Amperea xiphoclada</i> var. <i>xiphoclada</i> <i>Banksia marginata</i> <i>Bossiaea obcordata</i> <i>Bursaria spinose</i> <i>Cassinia longifolia</i> <i>Correa reflexa</i> <i>Daviesia latifolia</i> <i>Dilwynia cinerascens</i> <i>Dilwynia glaberrima</i> <i>Epacris impressa</i> <i>Grevillea chrysophaea</i> <i>Grevillea lanigera</i> <i>Hibbertia aciculari</i> <i>Hibbertia obtusifolia</i> <i>Indigofera australis</i> <i>Kunzea ericoides</i> <i>Leptospermum continentale</i> <i>Leptospermum myrsinoides</i> <i>Melaleuca parvistaminea</i> <i>Olearia lirata</i> <i>Platylobium obtusangulum</i> <i>Pomaderris intermedia</i> <i>Tetratheca pilosa</i>	Blackwood Heath Wattle Spreading Wattle Spike Wattle Juniper Wattle Honey-pots Broom Spurge Silver Banksia Spiny Bossiaea Sweet Bursaria Shiny Cassinia Common Correa Hop Bitter-pea Grey Parrot-pea Smooth Parrot-pea Common Heath Golden Grevillea Woolly Grevillea Prickly Guinea Flower Grey-leaf Guinea Flower Austral Indigo Burgan Prickly Tea-tree Heath Tea-tree Rough-barked Honey-myrtle Showy Daisy-busy Common Flat-pea Citron Pomaderris Hairy Pink Bells
Herbs	<i>Drosera peltata</i> ssp. <i>auriculata</i> <i>Gonocarpus tetragynus</i> <i>Opercularia varia</i> <i>Viola hederacea</i>	Tall sundew Common Raspwort Variable Stinkweed Ivy-leaf Violet
Other	<i>Arthropodium milleflorum</i> <i>Arthropodium strictum</i> <i>Austrodanthonia</i> spp. <i>Austrostipa</i> spp. <i>Billardiera scandens</i> var. <i>scandens</i> <i>Bossiaea prostrata</i> <i>Bulbine bulbosa</i> <i>Chrysocephalum semipapposum</i> <i>Clematis glycinoides</i> <i>Dianella admixta</i> <i>Dianella longifolia</i> var. <i>longifolia</i> <i>Gahnia radula</i> <i>Hardenbergia violacea</i> <i>Helichrysum scorpioides</i>	Pale Vanilla-lily Chocolate Lily Wallaby-grasses Spear-grasses Common Apple-berry Creeping Bossiaea Bulbine Lily Clustered Everlasting Forest Clematis Black-anther Flax-lily Flax-lily Thatch Saw-sedge Purple Coral-pea Button Everlasting

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Life form	Scientific Name	Common Name
	<i>Lepidosperma laterale</i>	Variable Sword-sedge
	<i>Leptorhynchos squamatus</i>	Scaly Buttons
	<i>Leptorhynchos tenuifolius</i>	Wiry Buttons
	<i>Lomandra filiformis</i>	Wattle Mat-rush
	<i>Lomandra longifolia</i>	Spiny-headed Mat-rush
	<i>Lomandra longifolia ssp. exilis</i>	Cluster-headed Mat-rush
	<i>Microlaena stipoides var. stipoides</i>	Weeping Grass
	<i>Platylobium formosum</i>	Handsome Flat-pea
	<i>Poa australis spp. agg.</i>	Tussock Grass
	<i>Podolepis jaceoides</i>	Showy Everlasting
	<i>Pteridium esculentum</i>	Austral Bracken
	<i>Stylidium graminifolium</i>	Trigger Plant
	<i>Stypandra glauca</i>	Nodding Blue-Lily
	<i>Tetrarrhena juncea</i>	Forest Wire-grass
	<i>Thelionema caespitosum</i>	Tufted Lily
	<i>Thysanotus patersonii</i>	Twining Fringe-lily
	<i>Thysanotus tuberosus</i>	Common Fringe-lily
	<i>Tricoryne elatior</i>	Yellow Rush-lily
	<i>Wahlenbergia spp</i>	Blue Bells
	<i>Xanthorrhoea minor ssp. lutea</i>	Small Grass-tree
	<i>Xerochrysum viscosa</i>	Sticky Everlasting

Source material:

Indigenous Flora Species Selection Guide for Bairnsdale & surrounds, Greening Australia (2008)

Ecological Vegetation Class bioregion benchmark, Gippsland Plain bioregion, EVC 151: Plains Grassy Forest, Department of Sustainability & Environment (2004)

In accordance with the requirements of Clause 2.0 of Schedule 8 to the Development Plan Overlay, it is expected that a Condition on Planning Permit will require the preparation of a Detailed Landscape Plan to the satisfaction of the Responsible Authority for any stage of development which includes the creation of a reserve containing a waterway.

Furthermore, it is anticipated any Planning Permit would include the mandatory condition relating to landscaping of public land (as specified at Clause 2.3 of Schedule 8 to the Development Plan Overlay), which would require the completion of landscaping to a standard to the satisfaction of the Responsible Authority.

11. Economic Assessment

The proposed Neighbourhood Activity Centre is located approximately 500 metres to the south of the subject land. Considerations relating to achieving an appropriate mix of commercial and retail uses are therefore not relevant to the consideration of this Development Plan.

12. Table of Figures

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(Lakes Entrance Northern Growth Area)**

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Signed:
Director, East Gippsland Shire Council
Date: ...20 June 2018...

Kate Nelson

SIMON ANDERSON C O N S U L T A N T S Structural, Civil & Project Engineers P.O. Box 1700 P.O. Box 566 111 Main St 191-193 Raymond St Bairnsdale, Vic, 3875 Sale, Vic, 3850 ACN 073 392 266 ACN 145 437 065	Job: Proposed Dwelling 138 Palmers Rd (CA 125) Lakes Entrance	Date: 13 Sep 2013
	Client: J & C Guillot Approved Development Plan	Designed: SJA
	Checked: Planning and Environment Act 1987 East Gippsland Planning Scheme	Job No.: 334914-A
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Development Plan Overlay Schedule 6
 (Lakes Entrance Northern Growth Area)

GEOTECHNICAL RISK ASSESSMENT

Kate Nelson



138 Palmers Rd, Lakes Entrance

Signed:
 Director, East Gippsland Shire Council
 Date: 20 June 2018

INTRODUCTION

This report is designed to demonstrate the level of geotechnical risk involved in relation to the proposed dwelling at 138 Palmers Rd (CA. 125), Lakes Entrance, during and after construction of associated works.

SITE DESCRIPTION

This Farming Zoned allotment (approx. 13.9 ha) has a large storage shed and hard stand area situated at the south west corner of the property, with existing gravel driveway access off Palmers Road. The overall subject site has well established grass/pasture cover with good surface drainage. The area of the proposed dwelling displays a low to moderate fall South East, towards a deep Ephemeral Watercourse, which runs north-south through the centre of the property. There is currently no driveway access to the site off Palmers Road.

PROJECT DETAILS

A two storey dwelling is proposed for the site. The construction details will be as follows;

- The proposed dwelling will be a slab on ground with cut and fill batters. This will result in extensive disturbance to the sites top soils.
- The construction of the proposed two-storey dwelling will result in the diversion of a small amount of rainfall from the site. Roof catchment water will be collected by a system of gutters/downpipes and directed to on-site rain water storage tanks.
- It is anticipated that all building and drainage works will be completed within 12 months from their commencement. A further 12 months may be required for completion of the landscaping works
- A stabilised vehicle access point is to be provided during and after construction.

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138 Palmers Rd (CA 125)
Lakes Entrance

Client: J & C Guillot

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Designed: SJA

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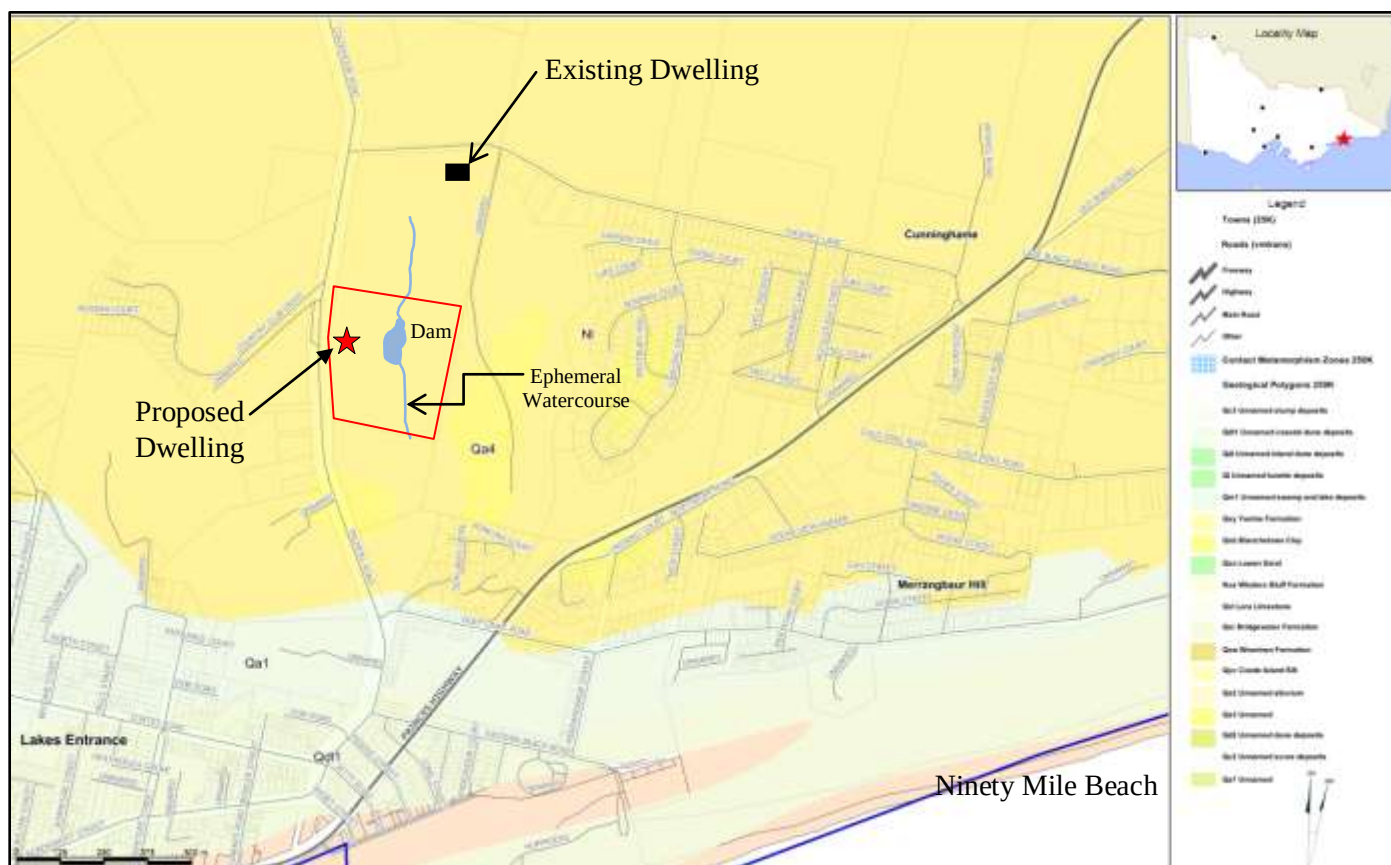
Development Plan Overlay Schedule 8
(Lakes Entrance Northern Growth Area)

METHODOLOGY

1. DESKTOP INVESTIGATION

A desktop investigation of the subject site was carried out using DSE and GeoVIC mapping of published soil survey information and noted watercourse locations.

Soils of the site have been mapped and described in Sustainable Soil Management "A reference manual to the major agricultural soils of the Bairnsdale and Dargo regions", and are described as belonging to the Stockdale (Sd) map unit with Munro (Mu). This unit occurs on rolling low hills and is comprised of Tertiary sediments and sands. Most of the land has been cleared of native vegetation and used for grazing. The surface soils are mostly fine textured soils, with a sandy loam to fine sandy loam sharply separated from a medium clay subsoil occurring at around 20-40cm, although some subsoils are clayey sands and sandy clays. Some of the more sandier surface soils have developed a "coffee rock" layer at the base of the A2 horizon.



Disclaimer: This map is a snapshot generated from Victorian Government data. This material may be of assistance to you but the State of Victoria does not guarantee that the publication is without flaw of any kind

REF: VANDENBERG, A.H.M., 1997. BAIRNSDALE SJ 55-7 Edition 2, 1:250 000 Geological Map (Series 1:250,000 geological maps. Geological Survey of Victoria.)

★ Denotes approximate location of Proposed Second Dwelling

Geological Unit	Geological Description	Mapping Unit
Nl (Tm-p)	Tertiary Marine, non-marine deposits consisting of gravel sand, silt.	Stockdale with Munro (Sd/Mu)

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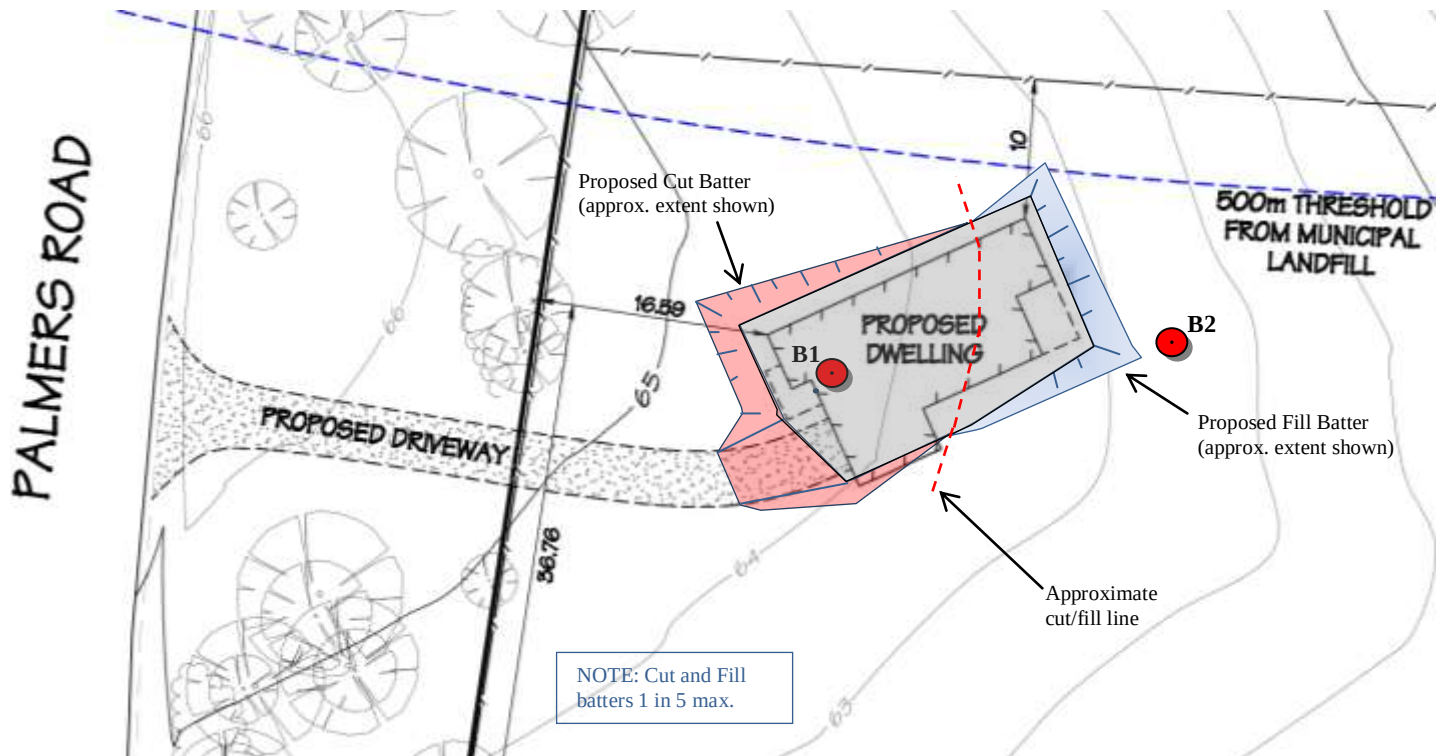
Development Plan Overlay Schedule 8
(Lakes Entrance Northern Growth Area)

METHODOLOGY cont'd..

2. FIELD INVESTIGATION

A site visit was carried out with an inspection of the area of the proposed two storey dwelling and of nearby landforms, features and developments.

Soil investigation bores were taken on the site (B1-B2) as shown on the site plan below. The bore logs are shown on page 4.

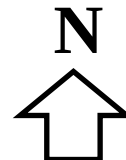


SITE PLAN

Not to Scale



Denotes soil investigation bores
(approximate locations)



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Note: Depths noted may vary if the site is cut and/or filled. All footings should penetrate the "Approved Founding Material" by at least 100mm.

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Development Plan Overlay Schedule 8
 (Lakes Entrance Northern Growth Area)

SUMMARY OF RISK

LANDSLIDE
SHEET/RILL EROSION
TUNNEL EROSION

Kate Nelson
LOW
 Signed:
 Director, East Gippsland Shire Council
 Date: 20 June 2018...

- Moderate to Low grades over the subject site, approximately 1 in 10 to 1 in 15.
- Highly permeable topsoils provide a moderate to rapidly drained surface, with minimal surface rain water run-off as a result.
- Well contoured landscape (Waxing Divergent) provides excellent surface water drainage and spreads runoff.
- Excellent grass coverage, preventing topsoils from being washed away (even in the heaviest torrential downpours).
- The subject site currently shows no signs of soil erosion or landslip.
- Natural soils (yellow duplex sedimentary landscape) of the site will have adequate strength and stability for concrete slab on ground and footings.
- An Erosion Management Plan would need to be implemented during and after construction of the proposed two storey dwelling, due to the slab on ground design with cut fill batters;
 - i. The form, bulk, scale and location of cut and fill is to be controlled to ensure that there are no adverse impacts on the Ephemeral Watercourse or neighbouring properties. (i.e. diversion banks and spoon drains)
 - ii. Identify a suitable storage area for stockpiles, with appropriate erosion control measures (i.e. Sediment fences)
 - iii. Where vegetation (natural grass cover) needs to be removed, leave it in place as long as possible.
 - iv. All erosion and sediment control measures to be inspected and maintained daily by site manager.
 - v. Fill batter at 1 in 5 to be stabilised with grass at end of construction works

Based on findings from both the Desktop and Site investigations the site is suitable for development as proposed and further intensive investigation would not be necessary to confirm the above findings.

VERIFICATION

I, the author of this document, declare that I am suitably qualified and experienced to carry out this site assessment.



Simon Anderson BE (Civil)CPEng MIEAust No 930355
BCC Registration No EC-1711
Date 13 Sep 2013