SUBMISSION TO THE SHIRE OF MURRAY

PROPOSED AMENDMENT TO THE RAVENSWOOD EAST OUTLINE DEVELOPMENT PLAN AND DESIGN APPROVAL

LOT 889 RODOREDA CRESCENT (FORMERLY LOT 1620 OLD MANDURAH ROAD) RAVENSWOOD

PREPARED FOR KIMBA PL

FEBRUARY 2022 (UPDATED JANUARY 2023)

ENDORSEMENT PAGE

This structure plan is prepared under the provisions of the Shire of Murray Town Planning Scheme No. 4.

IT IS CERTIFIED THAT THIS STRUCTURE PLAN WAS APPROVED BY RESOLUTION OF THE WESTERN AUSTRALIAN PLANNING COMMISSION ON:

25 SEPTEMBER 2013

In accordance with Schedule 2, Part 4, Clause 28 (2) and refer to Part 1, 2. (b) of the *Planning and Development (Local Planning Schemes) Regulations 2015.*

Date of Expiry: **19 OCTOBER 2035**

PROPOSED AMENDMENT TO THE RAVENSWOOD EAST ODP - FEBRUARY 2022

Contents

1.0 Introduction

2.0 Assessment Background

3.0 ODP Assessment Process

3.1 ODP Assessment – WAPC Approval 159195

3.2 Design Concept for the Area “Subject To Further Planning”

3.3 Ravenswood East Notations

4.0 Conclusion

Appendix

- Amended ODP
- EMP Implementation Plan
- Supplementary Traffic Letter

AMENDMENT TO THE RAVENSWOOD EAST ODP

1.0 INTRODUCTION

This report has been prepared for Kimba PL owners of Lot 889 Rodoreda Crescent (formerly Lot 1620 Old Mandurah Road), Ravenswood.

Title details are; Volume 4005, Folio 696 on Deposited Plan 420289.

The purpose of this report is to present an amendment to the Ravenswood East Outline Development Plan to round off the area 'Subject To Further Planning' with an approved design.

The Ravenswood East Outline Development Plan was endorsed by the Shire of Murray on the 21st August 2013 and by the Western Australian Planning Commission on the 25th of September 2013. The ODP has now been substantially developed through a number of subdivision approvals and has not been updated.

The proposed amendment to the “Ravenswood East ODP” will address design issues associated with area denoted on the ODP as 'Subject To Further Planning' and also bring the entire ODP up to date (refer to copy of the ODP on page 4)

Lot 889 subject of this amendment is designated “Special Development Zone” under the Shire of Murray Local Planning Scheme 4.

2.0 ASSESSMENT BACKGROUND

The Ravenswood East Outline Development Plan has been subject of three WAPC approvals:

- WAPC approval 157079 over Lots 9008 and 601 to the west section of the ODP comprising 4 stages now 80% complete
- WAPC approval 155048 over Lot 9201 north section of the ODP fronting Old Mandurah Road with initial stages completed and further stages underway
- WAPC approval 159195 over subject Lot 889 which is valid until 17 July 2024 which is pending development

The ODP has now been substantially developed through these successive subdivision approvals and associated stages which have addressed design assessment criteria including;

- Road hierarchy and transport impact - via three subdivision assessments
- Open space provision and drainage – each approval area has been assessed as stand - alone for the provision of open space and drainage
- Bushfire management – assessed for each approval area
- Liveable Neighbourhoods – all elements have been considered under each approval

The entire ODP is at subdivision design level for except for the area 'Subject To Further Planning.'

The various subdivision applications have now established a clear coordinated pattern over the entire ODP area which is not reflected on the current ODP. Lot 889 is the balance parcel of the original ODP area which is subject of WAPC approval 159195.

In accordance with the ODP notations the owners of Lot 889 engaged Coterra Environment to prepare an Environmental Management Plan (EMP) for the land which normally would be a condition of subdivision. The early preparation of the EMP provided:

- Design recommendations for incorporation into the area 'Subject To Further Planning'
- A clear understanding of developer obligations for the improvement to and management of the foreshore reserve

The EMP was subsequently approved by the Shire of Murray and Department of Water and Environmental Regulation. The EMP establishes clear guidelines on the treatment of the foreshore reserve and an agreed schedule of works.

Two agreements associated with subdivision and ODP conditions are in place which establish development obligations in relation to:

- The Old Mandurah Road Widening Deed 2021 which establishes widening contributions for Old Mandurah Road
- Foreshore Management and Improvement contributions approved and endorsed by the Shire of Murray on 2 September 2019

With this high level of assessment now in place Kimba PL has resolved to finalise design outcomes for their land.

The ODP amendment will:

- Update the plan to reflect abutting development and WAPC approval 159195
- Depict the recommendations of the Environmental Management Plan
- Established a design for the area “Subject To Further Planning”
- Remove outdated plans and notations from the endorsed ODP

The design option for the area “Subject To Further Planning” is a result of feedback via:

- Past negotiations with abutting owners and marketing analysis
- Design outcomes from the Environmental Management Plan (EMP)
- Meetings and feedback from Shire of Murray and Department of Planning Lands and Heritage

Current Ravenswood East Outline Development Plan



3.0 ODP ASSESSMENT PROCESS

The Lot 889 area and the associated area "Subject To Further Planning" forms the last development stage of the ODP and therefore requires a summary of any outstanding obligations regarding such issues as:

- Up to date public open space calculations for restricted and unrestricted open space
- The management of the foreshore reserve and implementation of the Environmental Management Plan
- Any traffic impact considerations associated with the design outcome proposed in the area "Subject To Further Planning"
- Other subdivision conditions/obligations including Old Mandurah Road widening and Department of Education and Training (DET) school contribution

Under the Structure Plan Framework, Planning and Development (Local Planning Schemes) Regulations 2015: Amendments to structure plans approved prior to the 2015 Regulations

17.4 Structure plans approved prior to the Regulations coming into effect will still be valid and continue to be used to guide decision-making. They will not have the force and effect of the scheme, but will be given due regard in decision making.

17.5 When an application to amend such a structure plan is received, the structure plan will generally not be required to be updated to the manner and form contained in this framework. The structure plan will be required to be updated to the extent needed to undertake the amendment proposed.

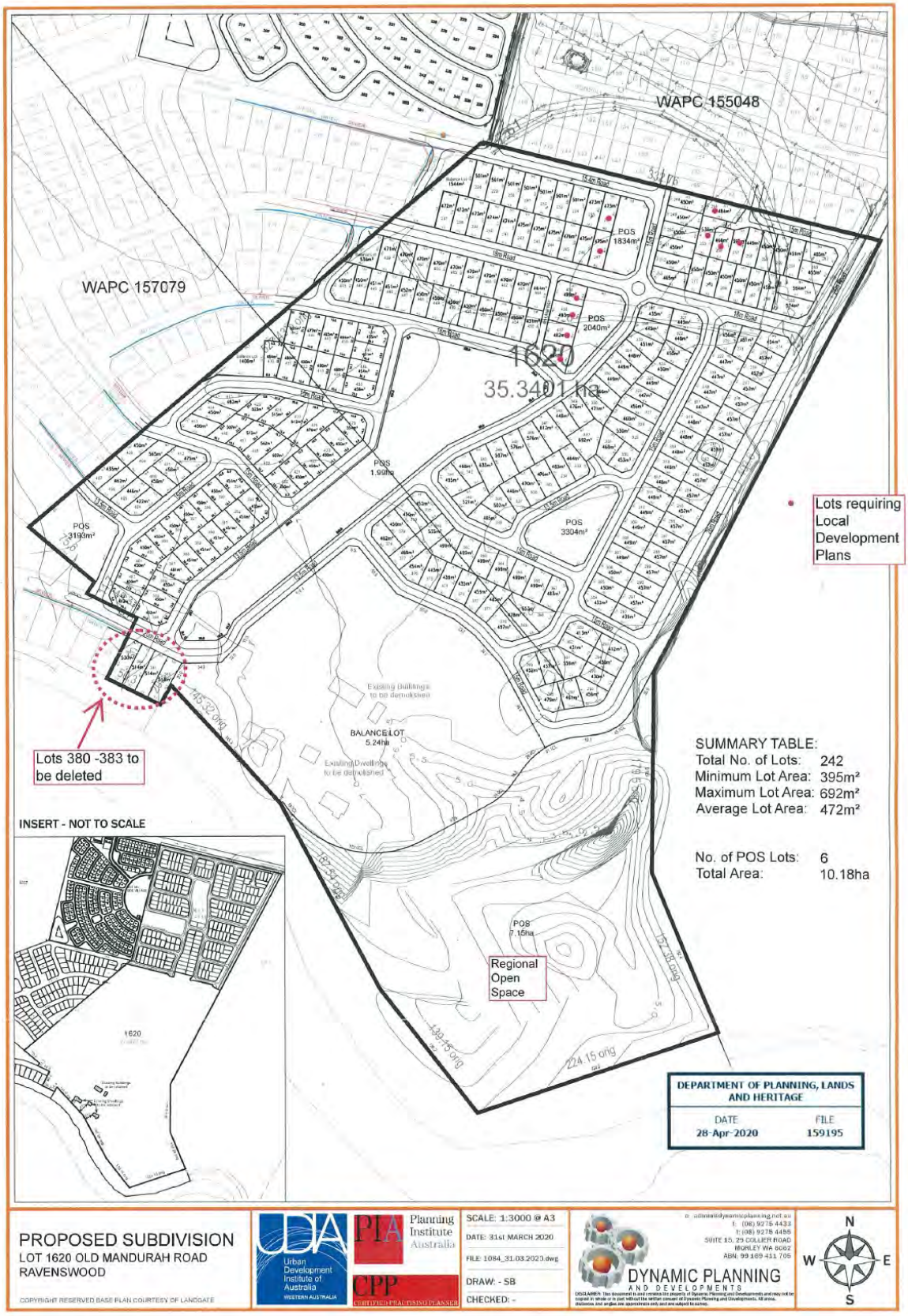
17.6 If amendments are proposed to structure plans approved prior to the Regulations coming into effect, the structure plan is also to be amended to remove any references to statutory provisions and having the force and effect of the scheme.

As per clause 17.5 the structure plan will be updated to the extent needed to undertake the amendment proposed. The recent WAPC application 159195 assessment process provides a high level of background assessment.

Application information includes:

- Planning Assessment/Analysis - Dynamic Planning and Developments 2020
- Traffic Report by KCTT March 2020
- Bushfire Management by Lushfire & Planning 16 March 2020
- Coterra Environment - Environmental Management Plan (EMP) 2018

The subdivision plan is depicted over page (Source: DPLH approval plan 20 April 2020)


WAPC 155048
WAPC 157079
1620
35.3401ha
POS 1834m²
POS 2040m²
POS 1.99ha
POS 3193m²
POS 3304m²
POS 7.15ha
BALANCE LOT 5.24ha
Existing Buildings to be demolished
Existing Dwelling to be demolished
Lots requiring Local Development Plans
Lots 380 -383 to be deleted
Regional Open Space
SUMMARY TABLE:
Total No. of Lots: 242
Minimum Lot Area: 395m²
Maximum Lot Area: 692m²
Average Lot Area: 472m²
No. of POS Lots: 6
Total Area: 10.18ha
INSERT - NOT TO SCALE
DEPARTMENT OF PLANNING, LANDS AND HERITAGE
DATE 28-Apr-2020
FILE 159195
PROPOSED SUBDIVISION
LOT 1620 OLD MANDURAH ROAD
RAVENSWOOD
COPYRIGHT RESERVED BASE PLAN COURTESY OF LANDGATE
Urban Development Institute of Australia WESTERN AUSTRALIA
Planning Institute Australia
CPP CERTIFIED PRACTISING PLANNER
SCALE: 1:3000 @ A3
DATE: 31st MARCH 2020
FILE: 1084_31.03.2020.dwg
DRAW: - SB
CHECKED: -
DYNAMIC PLANNING AND DEVELOPMENTS
SUITE 15, 29 COLLIER ROAD
MORLEY WA 6062
ABN: 99 169 411 705
N
W
E
S

3.1 ODP ASSESSMENT – WAPC APPROVAL 159195

The Ravenswood East Outline Development Plan is subject of three WAPC approvals:

- WAPC approval 157079 over Lots 9008 and 601 to the west section of the ODP comprising 4 stages now 80% complete
- WAPC approval 155048 over Lot 9201 north section of the ODP fronting Old Mandurah Road with initial stages completed and further stages underway
- WAPC approval 159195 over Lot 889 valid until 17 July 2024 which is yet to be developed

WAPC approval 159195 lays out the design for 242 green title lots and is discussed below.

PUBLIC OPEN SPACE: Source: Dynamic Planning and Developments application report.

Site area (excluding foreshore/ROS)	*28.1901Ha*
Required POS *Restricted 2% of site area* *Unrestricted 8% of site area*	*2.8190Ha* *5,638sqm* *22,552sqm*
Total POS Provided *Restricted POS Provided* *Unrestricted POS Provided*	*30,271sqm (10.74%)* *2,780sqm (0.99%)* *27,491sqm (9.75%)*

Foreshore open space comprises an additional 7.15ha of land.

The provision of POS is based on the total area of the entire subject site, inclusive of the proposed balance lot areas. When the balance lots are subject to further subdivision application no additional POS or any cash in lieu contribution is needed for further POS.

Approval 159195 establishes a clear understanding of POS provision and the location of all POS across the subject site. This confirms no further POS is required as part of design considerations within the area “Subject To Further Planning”.

TRAFFIC: Source: Dynamic Planning and Developments application report.

KCTT were engaged to prepare a Traffic Impact Assessment to support the proposed subdivision application.

KCTT examined the impact of the proposed subdivision and it was found that the existing and proposed road networks would be able to support the development proposed as part of the subdivision.

A summary of their key findings are provided below:

- *The development is expected to generate 1904 vehicle trips per day and 190 in the peak hour which is classified as a high impact on the surrounding road network;*

- *Although the impact of the development is classified as 'high' there is sufficient capacity in the surrounding road network to accommodate the traffic likely to result from the development;*

- *The proposed internal road network is suitable from a navigability perspective as all road will be able to accessed and serviced by a standard 8.8m long rigid waste truck; and*

- *The proposed road reserves are wide enough to accommodate the intended road profiles required by Liveable Neighbourhoods.*

In light of the above, the proposed subdivision is considered suitable from a traffic engineering stand point and the existing and proposed road network will be suitable to accommodate the likely traffic resulting from the proposed subdivision.

Further supporting information was requested by DPLH from KCTT to ensure the latest changes to the ODP are consistent with previous report and advice. A Supplementary Traffic Note was prepared by KCTT on 31.10.22 and this advice is reproduced below;

The existing plan shows a total of 238 residential lots with a balance lot of 5.24ha. The proposed change in will result in additional residential lots on the balance lot. Two residential density options have been considered - R20 (81 lots) and R30 (119 lots), with the latter adopted.

It should be noted that the original KCTT TIA did not consider the traffic impact from the possible residential land uses on balance lots. Therefore, the additional traffic impact from the adopted R30 coding with 119 lots will be considered in this letter.

The additional lots will generate 952 vehicular trips per day and 95 vehicular trips in the peak hour. Proposed roads vary form Access Street D with a 1,000 VPD capacity to Neighbourhood Connector B with a capacity of 3,000 VPD.

The capacity of the internal road network is sufficient to carry all the traffic volumes from the ODP area as demonstrated within this letter.

KCTT believe that the proposed internal road network along with the proposed widening of Old Mandurah Road will be successful in maintaining satisfying level of service and traffic safety in the surrounding area.

The Supplementary traffic note is included in the Appendix (Page 21).

PLANNING IN BUSHFIRE PRONE AREAS: Source Lushfire & Planning 16 March 2020

Relevant excerpts from the report are reproduced below.

The Executive Summary concludes:

As the subject site is located in a bushfire prone area in accordance with Department of Fire and Emergency Services (DFES) declared bushfire prone mapping, a Bushfire Attack Level (BAL) assessment and Bushfire Management Plan (BMP) has been prepared to support the proposed subdivision application.

Through the applicable bushfire investigations that have been carried out for the proposed subdivision, it is noted that by establishing the necessary Asset Protection Zone's (APZ's) around the proposed residential development it is possible to achieve the necessary separation required to achieve a BAL rating of BAL-29 or lower. In this regard all lots will be able to accommodate safe residential development.

The Environmental Management Plan addresses the environmental requirements contained within the Outline Development Plan and identifies three areas which are proposed for different levels of management being:

- *The River Reserve regional open space;*

- *A Western POS area; and*

- *The Foreshore Reserve.*

The Environmental Management Plan recommends that revegetation be undertaken around the conservation category wetland; and parts of the river foreshore.

All of the proposed lots will have a Bushfire Attack Level of BAL-29 rating or less. The majority of lots in the Estate will have a BAL-12.5 or BAL-Low rating. The main hazard interface is along the eastern boundary which is managed by a wide perimeter road and the completed development will have excellent access in multiple directions.

The vegetation on the site which is to be cleared for any development does not have any significant conservation value. The river foreshore and conservation wetland will be included as regional open space with separate rehabilitation and management plans.

Foreshore Reserve – This area is currently managed by the Shire of Murray. Additional support to the existing management is proposed through the planting of additional vegetation along the Murray River interface and bushfire prevention actions. The design of the foreshore works has focused on improving the ecological condition of the area, while minimising further maintenance requirements for the Shire of Murray.

The Dynamic Planning and Developments application report summarises:

Through the applicable bushfire investigations that have been carried out for the proposed subdivision, it is noted that by establishing the necessary Asset Protection Zone's (APZ's) around the proposed residential development it is possible to achieve the necessary separation required to achieve a BAL rating of BAL-29 or lower. In this regard all lots will be able to accommodate safe residential development

An updated Bushfire Management Plan was prepared in April 2022 by Lush Fire to address the revised ODP which concludes;

The proposed subdivision complies with the objectives of State Planning Policy 3.7 as:

1. It avoids any increase in the threat of bushfire to people, property and infrastructure. Development with a maximum BAL-29 rating it does not increase the threat of bushfire. The proposed subdivision design does not increase the bushfire threat as it complies with the Bushfire Protection Criteria and provides for the management of vegetation hazards, suitable road access and appropriate separation distances with all proposed lots having a BAL-29 rating or lower.

2. It reduces vulnerability to bushfire through the identification and consideration of bushfire risks in the design of the development and the decision-making process. The bushfire hazard and risks have been identified and assessed in this report.

3. The design of the subdivision and the development takes into account bushfire protection requirements and includes specific bushfire protection measures. The proposed development complies with the Bushfire Protection Criteria.

4. Achieves an appropriate balance between bushfire risk management measures and biodiversity, conservation values, and environmental protection. The vegetation on the site which is to be cleared for any development does not have any significant conservation value. The river foreshore and conservation wetland will be included as regional open space with separate rehabilitation and management plans.

The updated BMP under Table 6 "Implementation" puts forward recommendations with particular attention to point 1.2 which states:

That Lots 342 - 344 have a restrictive covenant, or other approved mechanism, to be implemented to ensure that no habitable buildings are constructed in the portions of the proposed lots that have been assessed as BAL- 40 or BAL-Flame Zone. Confirmation of the extent of the extent of the as BAL- 40/BAL-Flame Zone shall be provided as part of the subdivision clearance.

This to be addressed at subdivision assessment stage.

Note the recommendations of the EMP below which also provide recommendations for bushfire management.

ENVIRONMENTAL MANAGEMENT PLAN (EMP)

In 2019 the owners of the subject site engaged Coterra Environment EMP to prepare an Environmental Management Plan (EMP) for the site. In accordance with the approved ODP Notation 4. “An Environmental Management Plan shall be prepared, endorsed and implemented for the Conservation Category Wetland and its buffer in the western portion of the ODP area, the adjacent Murray River Foreshore and Regional Open Space as a condition of subdivision approval.”

The owners chose to advance the EMP ahead of the subdivision approval process to resolve developer obligations for the improvements to and management of the foreshore reserve. The recommendations of the EMP was costed and an agreement was prepared and endorsed with the Shire of Murray.

The obligations of the EMP covers the whole land holding and was subsequently approved by the Shire of Murray and Department of Water and Environmental Regulation.

The EMP incorporates an itemised and costed works schedule outlining works and payments to be undertaken at various stages of subdivision of the subject lands which has been agreed to by the owners and the Shire of Murray

EMP Executive Summary:

Foreshore Reserve – This area is currently managed by the Shire of Murray. Additional support to the existing management is proposed through the planting of additional vegetation along the Murray River interface and bushfire prevention actions.

The design of the foreshore works has focused on improving the ecological condition of the area, while minimising further maintenance requirements for the Shire of Murray.

Recommendations of the EMP that have been reflected in design considerations include:

- Introduction of a foreshore interface road
- Walk paths and lookout points along the top of the road reserve
- An improved buffer separation to the lagoon within the ROS reserve

Management Actions 2.8.2 (refer to appendix for Figure 7)

Bushfire management actions are generally proposed to include:

- *Create and maintain a 3.5m wide firebreak along the eastern boundary of the River Reserve ROS*
- *Undertake annual slashing (prior to 30th November) of the grassland present in the areas subject to this management plan.*

- *Install a 2m wide access path around the L-shaped wetland vegetation within the River Reserve ROS for the dual purpose of access and fire spread prevention. The proposed path location is shown on Figure 7.*

- *Provide two gated access points within the River Reserve ROS fencing as shown in Figure 7 to facilitate emergency and recreational access.*

- *Undertake weed control within the L-shaped wetland to assist to remove flammable weeds. No additional planting is proposed on the subdivision side of the wetland (i.e. northern edge) to not increase the bushfire risk posed by this area through increasing plant densities.*

The actions which are proposed to reduce bushfire risk and assist to make the site safer in the case of an emergency are summarised below.

Table 8: Management Actions – Bushfire

Action	Strategy	Timing	Areas of Site Applicable
River Reserve ROS – Rehabilitation			
E7	Create and maintain a 3.5m wide firebreak along the eastern boundary of the River Reserve ROS	Refer to Section 3.	River Reserve ROS
Western POS			
F2	Create and maintain a 3.5m wide firebreak along the cadastral boundaries of the Western POS area, unless a road interface is provided in these locations	Refer to Section 3.	Western POS

Action	Strategy	Timing	Areas of Site Applicable
General Obligations			
A3	Undertake annual slashing (prior to 30th November) of the grassland present in the areas managed under this management plan	Throughout the life of the EMP	River Reserve ROS, Murray River Foreshore Reserve and Western POS
A8	Alignment of the interface road to provide for a 30m buffer to the CCW within the River Reserve ROS.	Throughout the life of the EMP	River Reserve ROS, Areas within 30m of the CCW
River Reserve - Paths			
C3	Provide two gated access points to the River Reserve ROS access path from the adjacent subdivision as shown on Figure 7.	Refer to Section 3.	River Reserve ROS

Refer to appendix for a copy of Figure 7 of the EMP Implementation Plan which outlines design and foreshore treatments. Both the EMP and Bushfire Management Plan provide a high level of detail for bushfire mitigation.

3.2 DESIGN CONCEPT FOR THE THE AREA "SUBJECT TO FURTHER PLANNING"

The "area subject to further planning" extends from the southern side of Rodereda Crescent and its future extension north east as depicted under WAPC approval 159195. The subject area is rounded off with a proposed road interface along the north east boundary.

Four riverfront lots fronting Rodereda Crescent (proposed lots 380 to 383) are depicted on the WAPC application 159195 (refer to plan on page 6). These four lots had to be excluded from the approval of 159195 as they fall in the area "subject to further planning". These lots are depicted as "R20 Low Density" as depicted on the subdivision plan.

The design depicted below for the balance of the area "subject to further planning" is based on an R30 density using a 24 m x 12.5 m block dimensions and 300sqm block sizes. The popular block size for the Ravenswood area is currently 500 sqm. The owners have considered options for a higher density based on the R30 density code which may become a more popular block size as the ODP area becomes more fully established.

It is possible as housing supply becomes more limited in the local area this housing type may become more popular with small families, singles, couples and retirees. If the R30 option is considered unmarketable an amendment to the design will be sought for an R20 concept.



R30 DENSITY DESIGN – 119 HOMES

The concept is based upon various criteria including:

- Foreshore road interface in accordance with the EMP to provide separation with the reserve.

- Ensure the concept recognizes focal points along the foreshore reserve edge in accordance with EMP recommendations.

- Foreshore road reserve width to allow for provision of limited on street parking and traffic calming treatments at points to reduce traffic dominance and subject to detailed traffic design.

- Road interface to provide separation with the foreshore reserve and allow for a continuous road side pedestrian pathway along the reserve edge with appropriate retaining and interface treatments.

- Maintain road connections and intersection offsets compatible with WAPC approval 159195 design considerations.

- Create regular north/south facing lots with 12.0 to 12.5m frontages with 15m road reserves.

- Connect the area into the approved subdivision design with adequate road junction offsets.

The design has been prepared to an ODP level of detail, is indicative and subject to detailed design at the subdivision application stage.

Design considerations highlighted by the Shire of Murray are outlined below with comments added:

- The access street intersecting with the foreshore road should be relocated away from the bend in order to provide improved sight distances. - *The concept has been amended in this regard*

- The foreshore land falls quite steeply from the Special Development Zone portion of the land into the ROS. It will need to be demonstrated how the foreshore road can be constructed with any implications for level differences/earthworks in the ROS properly considered. – *This will be resolved through engineering design at the subdivision stage and it is acknowledged that works must not impact on the foreshore reserve. If for any reason earthworks and retaining are prohibitively expensive the road reserve will need to be increased to resolve interface and grade issues*

- Improved open-space connectivity should be provided from the linear open space through to the ROS. It is suggested a minimum width of open space in the order of 20m be provided. – *the concept has been amended to provide 20m at the foreshore edge and 10m at the road frontage which allows for a perpendicular pavement junction at the extension of Rodoreda Crescent while maintaining a 40m offset between nearby road junctions*

An R20 comparative concept was prepared for marketing and yield assessment and is depicted below. The design adopts the same design criteria described above for the R30 concept. This plan provides a comparison of yields between the R30 and R20 densities.



R20 DENSITY DESIGN – 81 HOMES

The R20 density is the logical base density or default level for development of the site. The R20 concept will yield a maximum of 81 home sites.

The R30 concept will yield some 119 homes resulting in a difference between the default R20 yield of 38 lots concept which provides a basis for traffic impact assessment.

Planning Assessment/Analysis - Dynamic Planning and Developments 2020 and the Traffic Report by KCTT March 2020 under WAPC approval 159195 concluded that:

The proposed subdivision is considered suitable from a traffic engineering stand point and the existing and proposed road network will be suitable to accommodate the likely traffic resulting from the proposed subdivision.

Given the scale of approved development within the whole ODP area it is likely the extra 38 lots over the default R20 density can be accommodated within the area “Subject To Further Planning” with minimal traffic impact to the wider road network.

3.3 RAVENSWOOD EAST NOTATIONS

As part of the ODP amendment assessment the original notations have been amended by:

- Deleting notation 1 as this is now dealt with via this amendment (recommended by Shire of Murray)

- Deleting notation 16 as the link road is not part of any planning strategy (recommended by DPLH)

- Adding new notation - *The detailed location of the mature trees in the southern portion of the Structure Plan area in the vicinity of the existing buildings to be identified and where practical retained as part of the subdivision design* (recommended by Shire of Murray)

Revised/Updated and renumbered notations now comprise;

1. 10 metre widening of Old Mandurah Road to be ceded free of cost as a condition of subdivision approval.

2. Arrangements being made for a 50% contribution toward the cost of upgrading Old Mandurah Road to an urban standard involving the first carriageway of an ultimate dual carriageway road, associated dual use paths, drainage, intersection treatments and lighting, as a condition of subdivision approval.

3. An Environmental Management Plan shall be prepared, endorsed and implemented for the Conservation Category Wetland and its buffer in the western portion of the ODP area, the adjacent Murray River Foreshore and Regional Open Space as a condition of subdivision approval.

4. Finished floor levels to be 0.5m above 1/100 year flood level.

5. The dedication and construction of the eastern link road to connect with Old Mandurah Road to be undertaken as part of appropriate staging as a condition of subdivision approval.

6. Conditions of subdivision approval will include such matters as: acid sulphate soils assessment, ceding of foreshore areas, ceding of the primary school site and mosquito management.

7. The proponent will be required to demonstrate that a 10% public open space contribution is achieved in accordance with WAPC policy as part of the subdivision application. As part of this the proponent is to demonstrate that proposed water management can be accommodated without a significant impact on the recreational use of the open space areas proposed under the plan with open space areas being modified if necessary to accommodate this.

8. All lots abutting public open space shall have visually permeable fencing and dwellings shall be designed to provide surveillance of the open space.

9. Any proposed changes to the existing fencing at the interface between the Lakeside Village on Lot 601 and the ODP are to be undertaken in consultation with the owners of the Lakeside Village and be approved by the Shire prior to construction.

10. Lots directly abutting Old Mandurah Road and those lots with dual road frontages will be subject of a Local Development Plan (LDP) to address street presentation to all street frontages through treatments including visually permeable masonry walls, landscaping and built form.

11. An Urban Water Management Plan shall be prepared, endorsed and implemented as a condition of subdivision approval.

12. No drainage infrastructure is to be constructed on the proposed school site without prior consent of the Department of Education.

13. Road reserve widths and the design of the local road network to be subject to review at the subdivision design stage.

14. An updated Traffic Management Plan shall be prepared and endorsed at the subdivision design stage which addresses both onsite traffic management issues and any offsite traffic management requirements. The plan is to be implemented to the specification of the Shire.

15. A Fire Management Plan shall be prepared and endorsed prior to subdivision approval, with relevant provisions implemented during relevant subdivision or development stages

16. The detailed location of the mature trees in the southern portion of the Structure Plan area in the vicinity of the existing buildings to be identified and where practical retained as part of the subdivision design

These are depicted on the amended Ravenswood East ODP (page 19).

4.0 CONCLUSION

The amended Ravenswood East ODP provides and accounts for:

- An up to date plan which reflects abutting approved development and WAPC approval 159195
- The implementation recommendations of the Environmental Management Plan in relation to the foreshore reserve
- A design for the area “Subject To Further Planning” which rounds off the ODP
- Removal of outdated plans and notations from the ODP

In support of ODP notations and WAPC 159195 approval conditions development agreements between the land owners and the Shire have been endorsed.

These include;

- The Old Mandurah Road Widening Deed 2021 which establishes widening contributions for Old Mandurah Road

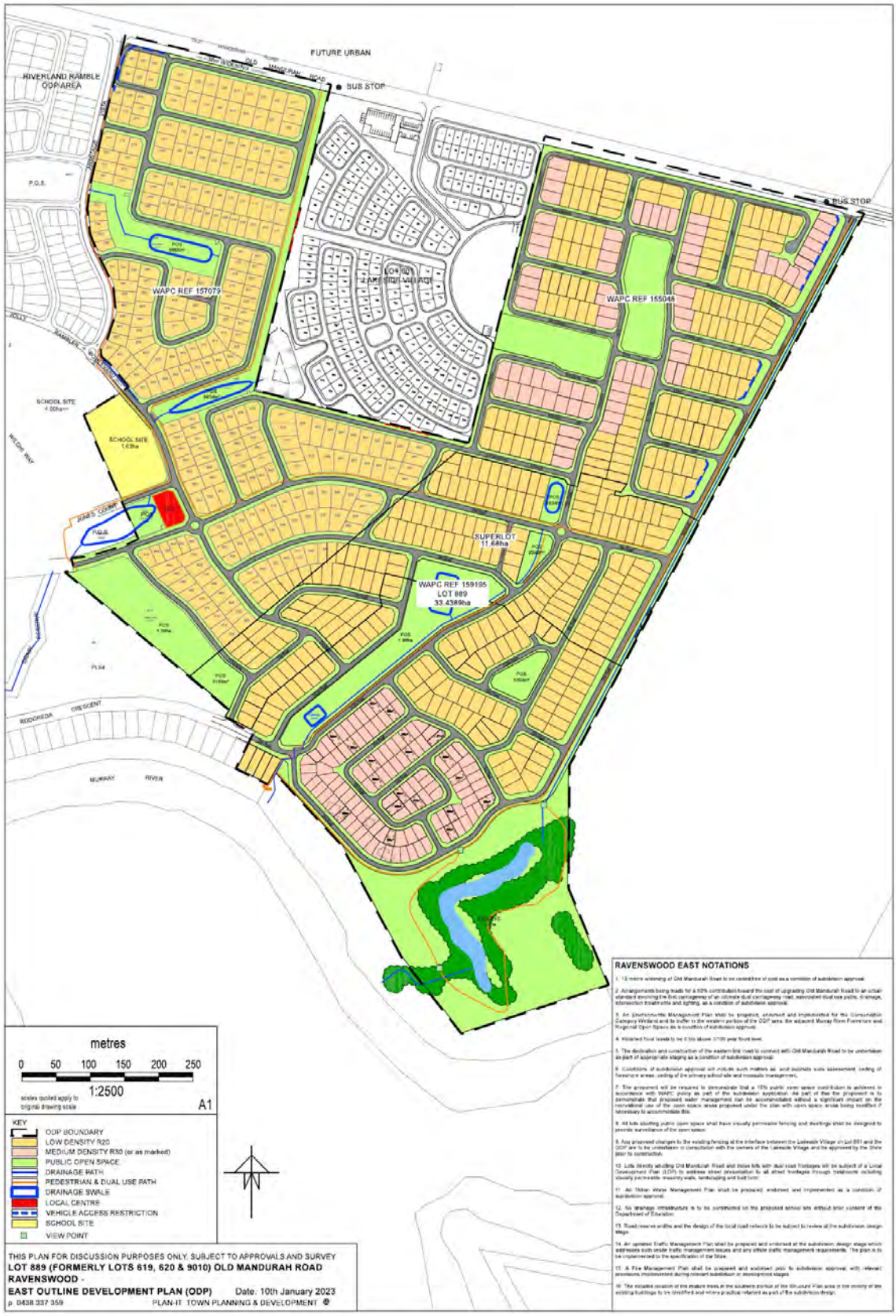
- Foreshore Management and Improvement contributions approved and endorsed by the Shire of Murray on 2 September 2019

WAPC approval 159195 outlines required contributions for the Department of Education;

- School contributions – Condition 19. The landowner/applicant making a pro-rata contribution towards the cost of the acquisition of the primary school site identified in the subdivision locality. (Department of Education)

The ODP notations, WAPC approval conditions and supporting deeds and agreements provide a sound basis for assessment.

APPENDIX; Ravenswood East Amended ODP January 2022 (Updated January 2023)


FUTURE URBAN
RIVERLAND RAMBLE ODP AREA
BUS STOP
BUS STOP
WAPC REF 157079
WAPC REF 155048
LOT 801
LAKESIDE VILLAGE
SCHOOL SITE
SCHOOL SITE
SUPERLOT
11.64ha
WAPC REF 159195
LOT 889
33.4389ha
RIDGE WAY
RIVER CLOSE
RIDGE WAY
RIDGE WAY
RIDGE WAY

APPENDIX; Coterra Environment EMP Implementation Plan



APPENDIX; Supplementary Traffic Note

Traffic Engineering Letter
KC01133.000 Lot 620 Mandurah Road, Ravenswood

31-10-2022

Plan It

Attn: Mr Derek Westera

Re: Traffic Impact of Balance Lot on the Existing and Proposed Network (Ravenswood East ODP)

Derek,

This letter has been prepared in order to examine the traffic impact of the change in the number of residential lots on the internal road network within Ravenswood East ODP.

The existing plan shows a total of 238 residential lots with a balance lot of 5.24ha. The proposed change in will result in additional residential lots on the balance lot. Two residential density options have been considered - R20 (81 lots) and R30 (119 lots), with the latter adopted.

It should be noted that the original KCTT TIA did not consider the traffic impact from the possible residential land uses on balance lots. Therefore, the additional traffic impact from the adopted R30 coding with 119 lots will be considered in this letter.

The additional lots will generate 952 vehicular trips per day and 95 vehicular trips in the peak hour. Proposed roads vary form Access Street D with a 1,000 VPD capacity to Neighbourhood Connector B with a capacity of 3,000 VPD. The capacity of the internal road network is sufficient to carry all the traffic volumes from the ODP area as demonstrated within this letter.

KCTT believe that the proposed internal road network along with the proposed widening of Old Mandurah Road will be successful in maintaining satisfying level of service and traffic safety in the surrounding area.

On subsequent pages are details of our findings. If you have any queries, please don't hesitate to contact us.

Regards,

Marina Kleyweg
Director | Principal of Traffic and Transport

Ana Marijanovic
Traffic Engineer