



Mildura Rural City Council

**FIFTEENTH STREET AND  
RIVERSIDE & ONTARIO AVENUES  
DRAFT REPORT  
For  
RESIDENTIAL DEVELOPMENT PLAN  
For  
MILDURA RURAL CITY COUNCIL**

August 2006

**FREEMAN & FREEMAN  
LAND SURVEYORS  
MILDURA.**

## CONTENTS:

Section 1: Introduction

Section 2: Context of the Site

Section 3: On Site Issues and Characteristics

Section 4: Engineering Constraints

Section 5: The Concept - Vision Plan

Section 6: The Concept – Indicative Components

Appendix 1: Summary of Consultation Feedback

## SECTION 1: INTRODUCTION

### Draft Report – Fifteenth Street and Riverside & Ontario Avenues Residential Development Plan

This report outlines the draft residential development plan for the greenfield site of approximately 16 hectares of residential zoned land bounded by Fifteenth Street (which abuts the south-west boundary of the site) and Riverside & Ontario Avenues. The aim of the plan is to identify the characteristics of the site and its surrounds and to put in place a framework for the future residential development of the land that will ensure good quality subdivision/development at an affordable price. The concept and themes adopted by the new Development Plan prepared by consultants David Lock Associates and GHD, for the Etiwanda, Irymple, Riverside and Nichols Point areas, have been included in this plan (with the permission and support of the MRCC and the consultants) in order to maintain consistency of standard and to ensure that future residents will enjoy living in the area and that the development of the area is in keeping with the existing environment. However; this report recognizes that parts of the subject area/land may not be as high quality as the four above-mentioned areas and, as such, the density of proposed lots may be greater (i.e. smaller lot sizes) to cater for more affordable land and house demands. Regardless of this, the vision still achieves a design that will ensure future residents will live in a neighbourhood that is accessible, pleasant, attractive and stimulating and that will foster social engagement. This was achieved by consultation with Land Owners, Developers, Servicing Authorities and Council Officers/Departments.

The process adopted in the study has four principal stages. They are understanding the context of the site (Section 2), understanding the main site issues and characteristics (Section 3), understanding the engineering/servicing constraints (Section 4) and identifying a vision (framework for future development) for the site.

The Context of the Site (Section 2) identifies the relationship between the parcels in separate ownership (that form the site) and relationship of the site as a whole with the surrounding area and with the wider Mildura Community (and its facilities and services.)

The Issues and Characteristics (Section 3) identifies factors thought to be important by the parties who were consulted and by the Consultants themselves.

The Engineering/Servicing Constraints (Section 4) relates mainly to drainage, sewerage, salinity and road network matters.

The Concepts (Section 5 & 6) relate to firstly the road and open space layout and secondly the characteristics of different types of roads and open space. The first part (Section 5) was achieved by going through a process of preparing subdivision layout concept plans (which took into account the results of Section 2, 3 & 4) for comment from the landowners, the Council and Lower Murray Water. The four separate landowners consist of long time owners who intend to subdivide/develop their land, a recent purchaser who intends immediate subdivision and long time owners who intend to sell to developers. Preparation of subdivision layout concept plans was possible due the relatively small area involved and provided the landowners with an idea of what could actually be achieved and give Council and Lower Murray Water an idea of what was likely to be proposed in the future. The second part (Section 6) is extracted direct from the new Development Plan prepared by David Lock Associates and GHD, with theirs and Councils support and consent, to ensure a consistent high standard of future subdivision in the Municipality. Section 7 (The Concepts – Design Guidelines) part of the new Development Plan by David Lock Associates and GHD has not been incorporated into this plan. Developments of a high standard should always be encouraged and Urban design Guidelines should be promoted, but the achievement of a high standard subdivision by this Development Plan should ensure that future housing (which can occur without reference to this plan) will be of a high standard as well as being affordable.

This Draft Report is provided to Council for comment and discussion, prior to provision of the Final Report (for exhibition).

## Neighbourhood principles

Given its relatively small area, the subject site will not be creating a new neighbourhood. Rather it will be part of an existing neighbourhood. However the detailed design of this compact site, in order to have a positive impact on the neighbourhood, is envisaged to reflect the States New Sustainable Neighbourhoods planning provisions, including the standards set in Clause 56 of the Planning Scheme, which can be summarized as:

- Compact walkable neighbourhoods where neighbourhood Centres support local services and facilities. Reduced car use is encouraged because public transport is easy to use and walking and cycling are promoted.
- Environmentally friendly development where lot layout and design supports more energy efficient dwellings.
- Diverse lot sizes and a range of lot types will be provided to better meet future community housing needs.
- Integrated water management that conserves our drinking water and locally manages the quality of urban run-off.
- Socially responsible development that is connected, overlooked and contributes to safety and perceptions of safety.

## Detailed Design Principles

These neighbourhood principles will be implemented through application of detailed design principles:

- Provide an attractive sense of arrival at each entrance to the site and to each character precinct, through the use of water and landscape.
- Articulate decision points in the movement network through the use of attractive and distinctive built form and landscape.

- Provide a permeable movement network for pedestrians and cyclists.
- Ensure that all streets and parks are overlooked by houses, to enhance their safety for pedestrians and cyclists.
- Promote traffic speeds and behaviour appropriate to a residential environment through the design of local streets and appropriate traffic calming measures.
- Ensure that the swales and overland flow paths are attractive spaces even when dry.
- Align secondary streets and lots to maximize the potential solar access.

## Key Features

The vision plan incorporated into this report applies these principals throughout the design. However there are some key features that are particularly important to achieving the vision. These relate to:

## Responding to Existing Characteristics

The unique 45 degree grid layout of Mildura provides a challenge and opportunity to respond creatively. This arrangement is sub-optimal for solar access which is an important consideration given it represents the most abundant source of “free” energy to manage comfort within the house. Making best use of this resource requires lots which can facilitate development which can have their longside facing north.

The vision plan seeks to ensure desire lines are catered for, encouraging walking and cycling a relatively more attractive way of getting around for shorter journeys. Routes are designed to link up key destinations and site assets with primary movement routes to provide for direct and logical movement through the site.

The road alignment is designed to respect drainage lines and use the natural fall of the land to provide an ecologically sustainable stormwater management system.

The roads and open spaces are designed to retain healthy trees and uses them as a generator of local identity. They introduce new qualities in parts of the site with little intrinsic quality.

The Concepts incorporate variations in density to respond to existing development beyond the site. Due to the nature of the site, in comparison with nearby developed land, it is anticipated that much of the site will be best suited to the development of more affordable housing on smaller lots.

The Road layout and construction design will be in keeping with best practice water sensitive urban design (WSUD) and as reflected in Councils new Water Sensitive Urban Design Guidelines (by Parsons Brinckerhoff) and the new Clause 56. The impact of stormwater is reduced by incorporating WSUD to protect and enhance natural water systems and to integrate stormwater management into the landscape. The proposed open space will contribute significantly to the area's character and provide a park within a comfortable walking distance of anywhere in the study area, and promote walking and cycling.

The location of the proposed Avenue/Boulevard and the connecting road from Fifteenth Street will ensure Secondary streets/courts are aligned where possible to provide a direct visual link to the POS and ensure that swale drains can be used to filter stormwater run-off and mitigate peak flows. The design of secondary streets and adjoining built form and landscape will provide a clear expression of the street hierarchy, which will help make the neighbourhood more legible and less homogenous.

In residential 1 zoned land where the smaller lots make getting good solar access issues more of a challenge, most streets will be generally orientated north-south to ensure the long side of most lots face north to facilitate good solar access.

Intersections will be designed to avoid conflict and ensure there is no ambiguity as to priority.

## Neighbourhood focal point

A development node around a village green containing play, recreation and social infrastructure around a distinctive and striking landscape feature, is located at the junctions of the primary movement networks and (where possible) the drainage line to:

- Create a neighbourhood focal point
- Reinforce the clarity of the overall urban structure
- Create a more visually interesting experience as one moves through the new neighbourhood.
- Generate local identity on a walkable neighbourhood scale – reflecting the characteristic density gradients of regional city in a rural environment.

-

## Developing character areas

Landscaping, road layout, lot layout and lot sizes are all used to create a range of different character areas. This will enhance the visual interest and distinctiveness of the area and provide an appropriate way of accommodating the transition from urban to rural common to all areas. A green skyline and shaded streets will improve the amenity of the roads and other public spaces of the area and facilitate more pedestrian activity during summer.



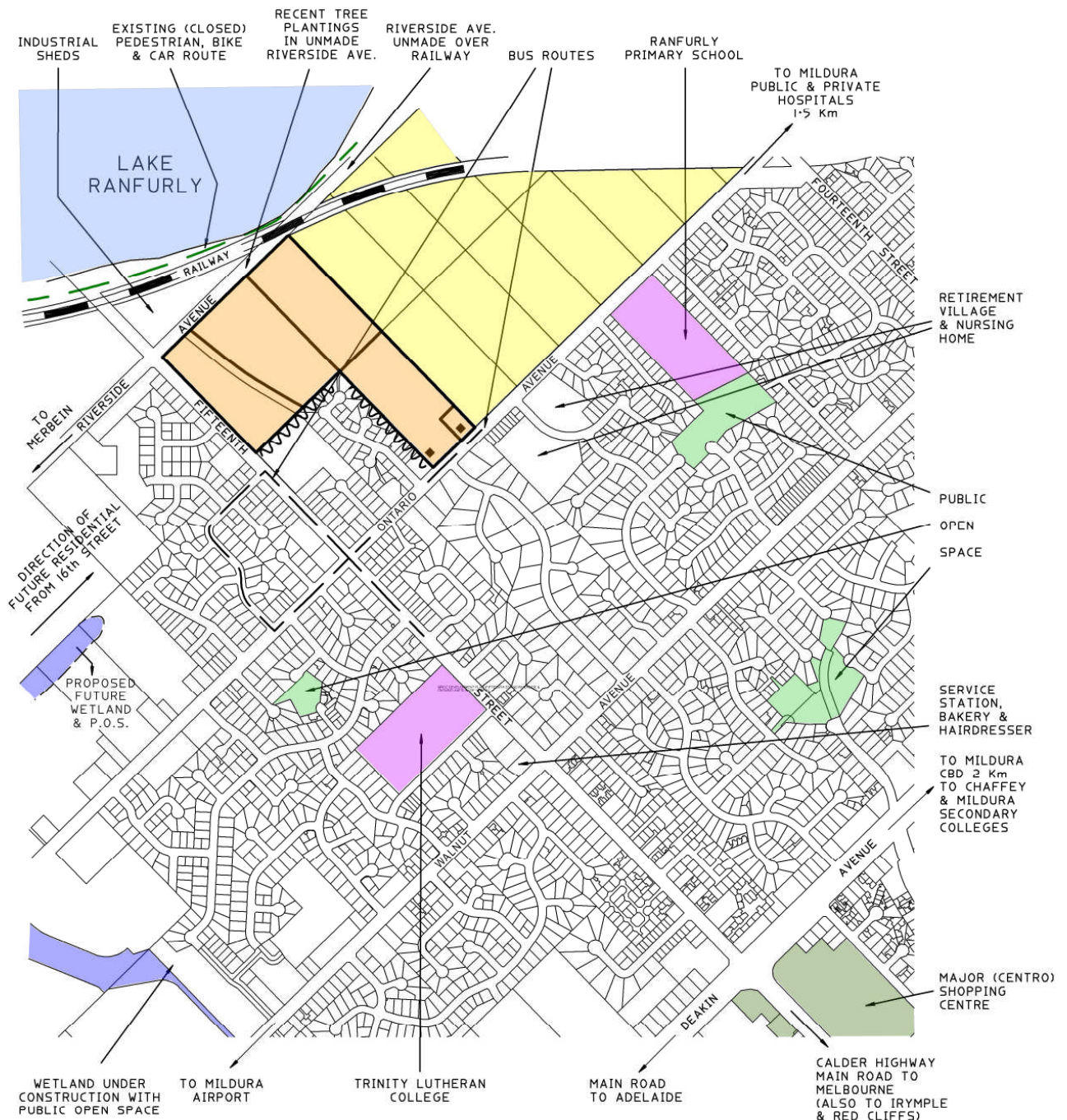
## SECTION 2: CONTEXT OF SITE

### Draft Report – Fifteenth Street and Riverside & Ontario Avenues Residential Development Plan

The diagram on the following page (page 10) details the context of the site. The site is small (about 16 hectares) and on the edge of the 2030 Residential Growth Boundary shown on the Mildura Town Structure Plan. It adjoins, and is nearly to, both existing residential developments and a non urban (Rural) zone. It is nearby to some shops, schools and community facilities, but some distance from Mildura CBD. The major Mildura South residential growth areas are nearby and slightly further again from the Mildura CBD. The Industrial type sheds situated directly across Riverside Avenue from the subject site detract from the visual amenity that Lakes Ranfurly and Hawthorn could provide the site. Future rezoning of the adjacent land to LDRZ, in keeping with other land on the lake side of Riverside Avenue, may be a method of encouraging a change in land use. There are no possible links into the property from adjoining residential land, excepting the (remote) possibility of pedestrian access from Sterling Drive via what is currently a Sewerage Reserve. The existing retaining wall, at the rear of the Sterling Drive Subdivision, is a detraction that requires attention by this plan. Council may no longer be proceeding with the roundabout that was proposed for the corner of Fifteenth Street and Riverside Avenue. It is likely that there will be giveaway signs in Fifteenth Street, with the extension of Fifteenth Street towards the lakes (across Riverside Avenue) only having a narrow pavement. As well as the Development Plan Overlay (which is the reason for this plan) and a Development Contribution Plan Overlay, the site is affected by a Salinity Management Overlay the Schedule to the Overlay contains a diagram (REM Preliminary Assessment Tool: Interpreted Urban Salinity Risk (Figure 3 July 2004)) that indicates that part of the site has a Very High Interpreted Urban Salinity Risk.

# MILDURA RESIDENTIAL DEVELOPMENT PLAN FIFTEENTH STREET AND RIVERSIDE & ONTARIO AVENUES

## CONTEXT ANALYSIS



0 100 200 500 1000

LENGTHS ARE IN METRES

SCALE 1:10000 A3 PLAN



- SUBJECT SITE  
(BOLD BLACK LINES INDICATES SEPARATE OWNERSHIP)



- ADJOINING COLLEGE LEASE LAND



- EXISTING DWELLINGS



- EDGES ACROSS WHICH THERE CAN BE NO ACCESS TO THE SITE

NORTH

### STRATEGIC PLANNING CONSIDERATIONS

- THE MILDURA STRUCTURE PLAN IDENTIFIES THIS AREA FOR RIZ

### STATUTORY PLANNING CONSIDERATIONS

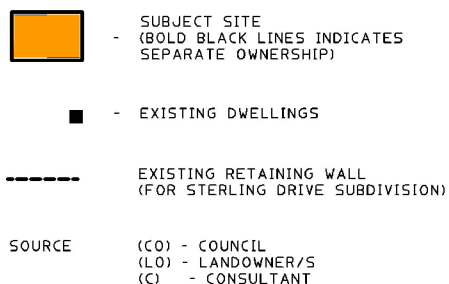
- THE LAND IS ZONED RIZ (STANDARD DENSITY RESIDENTIAL).
- A DPO (DPO 1) APPLIES TO THE LAND.
- A DCPO APPLIES TO THE LAND.
- A SMO APPLIES TO THE LAND.

### SECTION 3: ON SITE ISSUES AND CHARACTERISTICS

#### Draft Report – Fifteenth Street and Riverside & Ontario Avenue Residential Development Plan

The design on the following page (page 12) details the on site issues and characteristics. The site is small (about 16 hectares) and consists of parcels in four separate ownerships. The main issue to the landowners is the retaining wall at the rear of the Sterling Drive subdivision. It is unsightly and some owners feel it does not appear to be constructed well and they strongly believe that improvements necessary to the wall or buffering of the wall should not be at their (or a developers) expense at the time of subdivision. Lower Murray Water indicated that the northern (lowest) most parcel “will be difficult to sewer”. It is likely that the northern part of that lot will also be difficult to drain. It is about the same area that has the Interpreted Very High Urban Salinity Risk. There is an existing Sewerage Pump Station Reserve that could possibly provide a pedestrian link between the end of Sterling Drive and the proposed Public Open Space. Lower Murray Water have given no commitment, but have indicated they would consider the matter “if a formal request was made”. At the time of development/subdivision of the properties providing the POS, Council could consider asking the Sterling Drive residents if they would like direct access to the parkland.

## ISSUES PLAN



- RIVERSIDE AVENUE VERY UNLIKELY TO BE CONSTRUCTED THROUGH TO 14TH STREET, OVER THE RAILWAY (CO).
- PROPOSED ROUNDABOUT AT 15TH STREET & RIVERSIDE NOT LIKELY TO PROCEED. (CO)
- RETAINING WALL (AT REAR OF STERLING DRIVE SUBDIVISION) REQUIRES BUFFER TREATMENT (LO, C & CO).
- POSSIBLE LAND USE CONFLICT WITH INDUSTRIAL SHEDS ACROSS RIVERSIDE AVE (C).
- FUTURE USE OF ADJOINING RURAL ZONED COLLEGE LEASE LAND UNKNOWN. LAND IS PREDOMINANTLY VACANT. (C&CO)
- SOME SEWERAGE & DRAINAGE SERVICING PROBLEMS WITH NORTHERN PART OF SITE, AS WELL AS VERY HIGH URBAN SALINITY RISK ISSUES TO ADDRESS.

## SECTION 4: ENGINEERING CONSTRAINTS

Draft Report – Fifteenth Street and  
Riverside & Ontario Avenue  
Residential Development Plan

Development of the site will complete a small section of Residential zoned land in the area.

The diagram on page 16 details existing Stormwater and Wastewater infrastructure for the area

### **Stormwater Drainage**

The Mildura Rural City Council is the urban drainage authority. The site will be drained to the nearby existing open channel/drain that passes through College Lease land from Ontario Avenue to Lake Ranfurly. The northern (lower) corner of the site may need to be built up, or dealt with by some initiative way, to be commanded.

### **Sewerage**

Lower Murray Water is the relevant servicing authority. They were consulted. There is an existing sewerage pump station at the end of Sterling Drive that can service a majority of the site. The northern (lower) corner of the site may need to be built up, or dealt with by some initiative way, in order to be serviced.

### **Potable (Town) Water**

Lower Murray Water is the relevant authority. Subject to internal reticulation to LMW standards the site can be serviced. Lower Murray Water have a (ring) water main along unmade Riverside Avenue and its position should be taken into account in the design of any works along Riverside Avenue.

### **Electricity Supply**

Powercor advise that electricity can be made available, subject to their standard conditions of supply.

### **Telecommunications**

The provision of telecommunications services should not be a problem. Telstra and Neighbourhood Cable should be contacted at the time of subdivision design.

### **Natural Gas**

Origin Energy advise that gas can be made available, subject to their standard conditions of supply.

### **Rural Irrigation and Drainage**

The subject properties are in the First Mildura Irrigation Trust (FMIT) irrigation and drainage district. They may have assets on or near the site that need to be protected. They may require easements to be created over their assets. Other assets/pipes may become redundant as the result of residential development. Applications (under the water act) will need to be made to the Trust and their requirements, including excision of development land from the Trusts district, met.

### **Traffic & Public Transport**

Mildura Bus Lines were consulted. They have bus routes in Fifteenth Street and Ontario Avenue, with bus stops along both roads very near the subject site, and do not envisage a bus route through the site.

Council no longer envisage a roundabout at the corner of Riverside Avenue and Fifteenth Street. Giveway signs are proposed in Fifteenth Street. Any road, through the site, between Riverside and Ontario Avenues should be designed to discourage “through” traffic looking for a short cut.

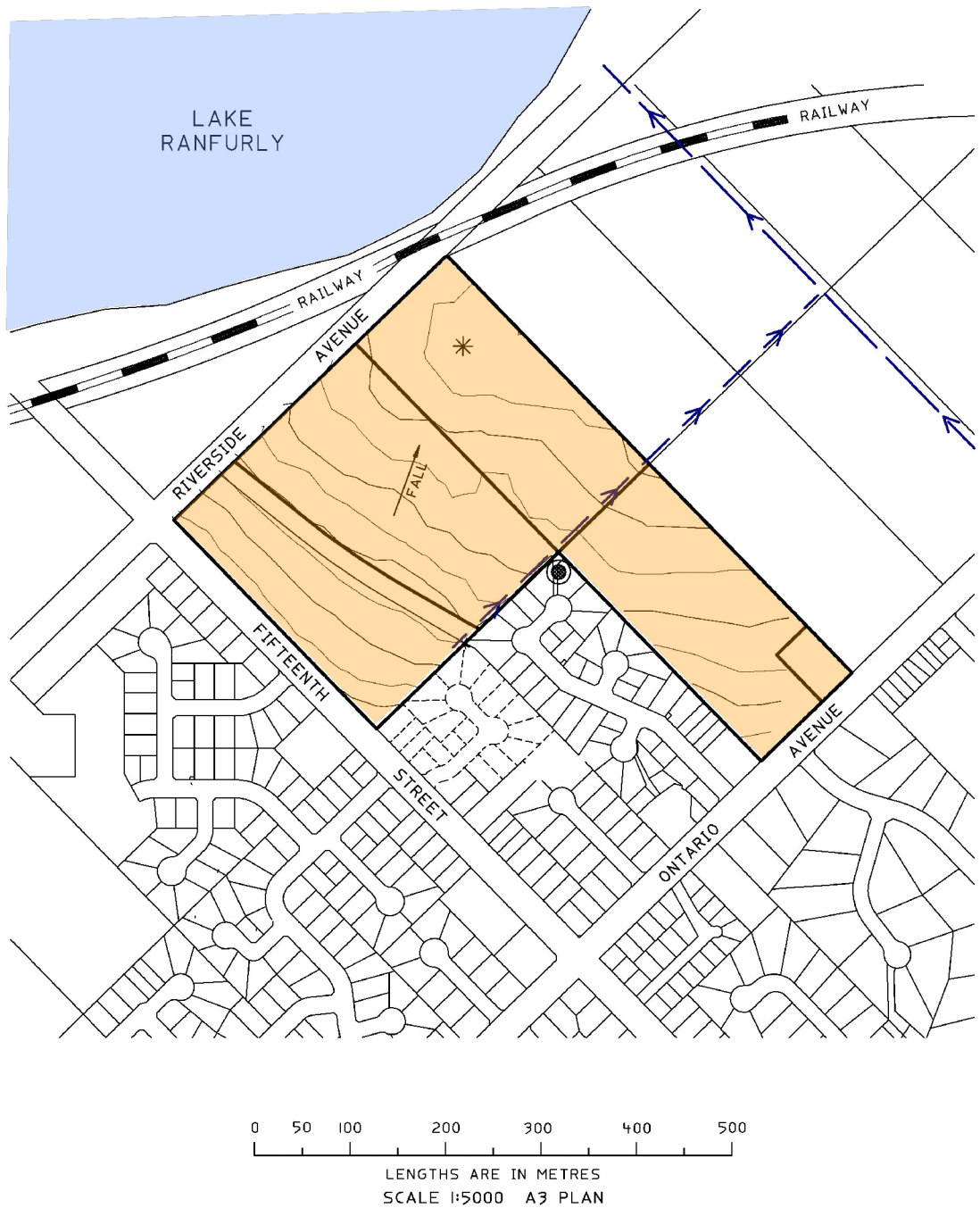


### **Salinity**

A Salinity Management Overlay affects the site. Any permit application will need to address the requirements (as appropriate) at Clause 44.02.2 (of the Salinity Management Overlay) and any permit application for subdivision will need to be accompanied by a Site Capability Report as per Clause 1.0 for the Schedule to the Salinity Management Overlay. The risks identified by the required detailed site analysis will take precedence over the current Interpreted Risks. The Interpreted Very High Risk land will require a lower level risk result from the detailed site analysis prior to any development being permitted. A Salinity Action Statement will be required at the time of subdivision.

MILDURA RESIDENTIAL DEVELOPMENT PLAN  
FIFTEENTH STREET AND RIVERSIDE & ONTARIO AVENUES

**STORMWATER & WASTEWATER MANAGEMENT**



- CONTOURS SHOWN ARE AT 0.5m INTERVALS VIDE PRELIMINARY LEVELS BY FREEMAN & FREEMAN
- \* - NORTHERN (LOWER) PART OF SITE WITH SEWERAGE & STORMWATER COMMAND/SERVICING PROBLEMS.

- SUBJECT SITE (BOLD BLACK LINES INDICATES SEPARATE OWNERSHIP)
- EXISTING OPEN DRAIN
- PROPOSED CONNECTION TO EXISTING OPEN DRAIN (EASEMENTS REQUIRED)
- EXISTING LOWER MURRAY SEWERAGE PUMP STATION WITHIN SEWERAGE RESERVE



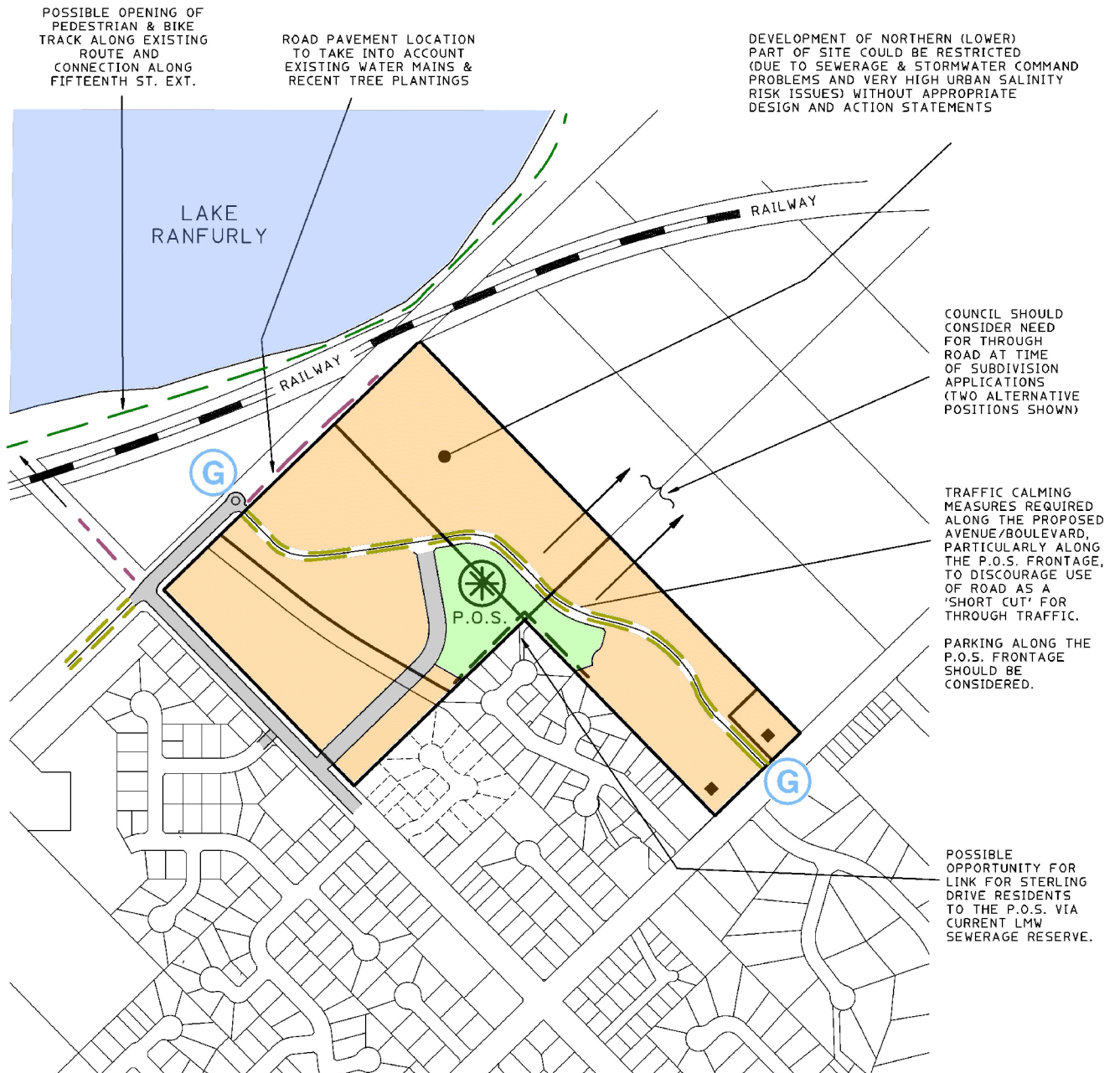
## SECTION 5: THE CONCEPT – VISION PLAN

### Draft Report – Fifteenth Street and Riverside & Ontario Avenue Residential Development Plan

The diagram on the following page (page 18) details the Vision Plan. A wide landscaped Avenue/Boulevard is proposed through the site between Ontario and Riverside Avenues. A Gateway Feature is proposed at each end of the Avenue/Boulevard. A connecting road is proposed from the Avenue/Boulevard out to Fifteenth Street. This will provide further residents easy access directly out to all 3 existing collector streets. A significant area of Public Open Space is proposed at a central point of the site. It will also be affective in buffering the existing retaining wall from the future residential development.

MILDURA RESIDENTIAL DEVELOPMENT PLAN  
FIFTEENTH STREET AND RIVERSIDE & ONTARIO AVENUES

# VISIONS PLAN



## SECTION 6: THE CONCEPT – INDICATIVE COMPONENTS

Following pages (pages 20 to 31) are extracts from the new Development Plan (for the Etiwanda, Irymple, Riverside and Nichols Point areas) prepared by David Lock Associates and GHD. They are included in this plan with the permission and support of MRCC and the consultants.

## APPENDIX 1: SUMMARY OF CONSULTATION FEEDBACK

### Draft Report – Fifteenth Street and Riverside & Ontario Avenue Residential Development Plan

#### OBSERVATION/COMMENTS

Council

**1/ Drainage available, subject to easements being acquired through to the existing open drain.**  
Easements currently being obtained to accommodate approved subdivision of adjoining property in Fifteenth Street.

**2/ Through road between Riverside and Ontario Avenues should be of the wide Avenue/Boulevard type.**  
Traffic calming measures, particularly along the P.O.S. frontage, will be necessary to avoid creation of a “rat run”.

**3/ Proposed new intersection works of Fifteenth and Riverside may encourage traffic to look for a “short cut” through the site.**  
As per 2/

**4/ Parking spaces maybe appropriate along the P.O.S. frontage and could form part of the necessary traffic calming measures.**  
Noted and supported.

**5/ A small roundabout incorporating the Gateway Feature, could be placed at the intersection of the Avenue/Boulevard and Riverside Avenue and could form part of the necessary traffic calming measures.**  
Noted and supported.

**6/ The plan should make particular note that part of the site has a Very High “Interpreted” Urban Salinity Risk.**  
Done

**7/ Can the railway end of Riverside Avenue be closed and incorporated into the subdivision.**  
No. Lower Murray Water have water supply pipeline (ring main) within unmade Riverside Avenue on the same side of the road as the subject site.

**8/ Native tree plantings in new streets and indigenous in P.O.S.**  
Is indicated in Section 6 (The Concepts – Indicative Components of the Vision Plans).

**9/Road widths, footpaths, safety, access to Public Transport (particular for lower social economic groups) and affordable land (for more affordable housing) are all matters of importance for youth, families, the aged and the disabled.**  
Supported by plan.

Lower Murray Water

**10/ Water is available.**

Noted

**11/ There is an existing sewerage pump station at the end of Sterling Drive that can service the majority of the site.**

The area that LMW cannot immediately command has been identified in the report.

**12/ There is a (ring) water main along unmade Riverside Avenue. It is on the same side of the road as the subject site.**

Future design of road works in Riverside Avenue should take the location of the main into account.

**13/ LMW would consider the current sewerage reserve providing pedestrian access from Sterling Drive to the proposed P.O.S.**

Possibility of link noted on the Plan, but would require much consideration and consultation

Powercor and Origin Energy

**14/ Electricity and natural gas supplies can be made available, subject to standard conditions..**

Noted

FMIT

**15/ Site is in the FMIT Irrigation and Drainage District. They may have assets on or near the site that need to be protected. They may require the creation of easements over their assets. Other assets/pipes may become redundant as the result of residential development. Applications will need to be made to the Trust and their requirements, including excision of developed land from the Trust District, met.**

Noted

Mildura Bus Lines

**16/ Current bus routes in the area are along Westside Boulevard, Fifteenth Street and Ontario Avenue. Bus route through site unlikely.**

With proposed through roads between Riverside and Ontario Avenues and link road from Fifteenth Street, all future lots should have appropriate access to the existing bus stops.

Landowners

**17/ All keen to either develop their land or sell it for development, but all acknowledge the Planning (DPO) process.**

Will probably result in immediate development/subdivision on adoption of Development Plan.

**18/ Existing retaining wall at the back of the Sterling Drive subdivision is a significant problem.**

Creation of the proposed P.O.S. enveloping the retaining wall area and the mounding of soil and/or planting of trees along the common boundary should improve the situation.

**19/ Council should be responsible for the costs associated with the retaining wall problem.**

Noted.

**20/ The possible link between the proposed P.O.S. and the Sterling Drive subdivision, via the current LMW Sewerage Reserve, may create safety and law and order issues.**

LMW's consent not guaranteed and the views of the residents in Sterling Dr. should also be sorted.