



prepared for mildura rural city council

by hansen partnership

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preface

The Land Use Vision and Urban Design Framework sets out long term strategies and design directions for the future development of this area to ensure that it is sustainable, practical and enhances the land's unique characteristics.

This document proposes a Framework that will enable a degree of growth and activity to occur while responding to the study area's relationship with Mildura City and significant surrounding environmental qualities.

The draft Ontario and Flora Land Use Vision and Urban Design Framework Report was placed on Public Exhibition in April 2010 and received a total of 12 submissions. Responses to each submission were assessed and issued to Council for final consideration.

Subsequent to the Public Exhibition period, a Councillor meeting was held in May 2010 which determined - *That Council:*

(i) Adopts the Ontario Flora Precinct Plan Draft Report dated March 2010 as the Final Plan subject to:

- The recommendations made in the response table;

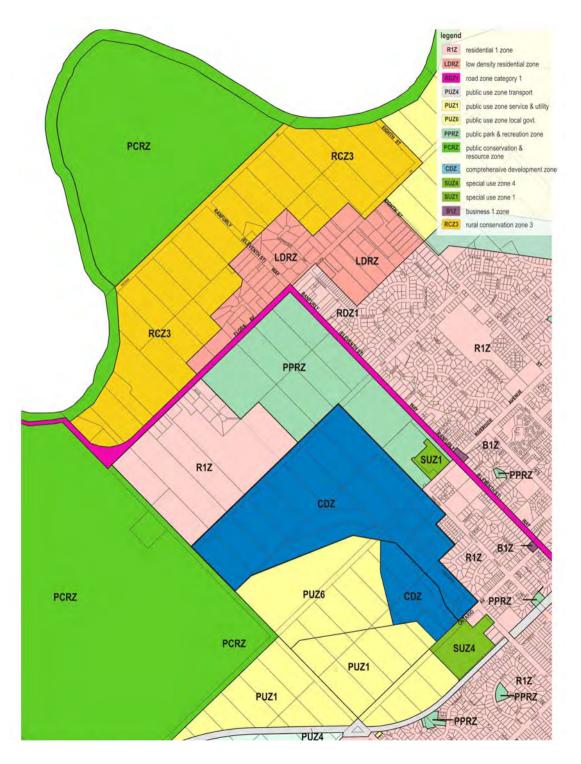
- The Plan being amended to provide for all land currently zoned LDRZ and that part of Lot 1 LP 94487 currently zoned UF2, to the east of Flora Avenue and up to the boundary of Mildura Golf Club and the Aerodrome Oval Reserve, to be re-zoned to Residential 1 (RZ1) which reflects the advice contained in the letter dated 19 May 2010 (Appendix 3 within this report) provided by the Mallee Catchment Management Authority under Division 4 of Part 10 of the Water Act, 1989; and

- The Plan be amended to delete the proposed public acquisition overlay over portion of the land.

(ii) Seek authorisation from the Minister for Planning under the provisions of the Planning and Environmental Act to exhibit an Amendment to the Mildura Planning Scheme to implement the Mildura Structure Plan and zoning changes proposed in the Ontario-Flora Precinct Plan as adopted.

(iii) That Council provide the strategic support for the re-zoning.

The amendment documentation and associated plans have been prepared to reflect Councillor's decision.



part a: the plan

1 introduction

Hansen Partnership Pty Ltd has been engaged by Mildura Rural City Council to prepare a *Land Use Vision and Urban Design Framework for the Ontario-Flora Precinct.* The project aims to:

'Provide Council with a long term Vision and accompanying Urban Design Framework to guide future subdivision, development and use that together can enhance economic, social and environmental objectives for the future of this important precinct to Mildura'

The Land Use Vision and Urban Design Framework has been undertaken in a collaborative manner with Councillors, Council staff, relevant authorities and with feedback from the community to ensure the development of a clear and supported strategy.

1.1 report structure

This report is structured in the following manner:

part a: the plan

The first section of the report provides a summary of key features and characteristics of the Ontario–Flora Precinct. Appendix 1 contains the detailed background analysis of the Study Precinct and key project principles that were established through consultation with the community, landowners, stakeholders and agencies.

This section then outlines an overall Vision for the Study Area and highlights key objectives.

Detailed land use and urban design strategies are then articulated for a number of sub-precincts to provide further direction on 'how' to achieve the ultimate Vision.

part b: strategic justification

This second section of the report seeks to justify the vision and describes the key elements that will influence the future development of the Ontario–Flora Precinct. It details a response to a number of strategic planning issues including: policy framework, land use zoning, strategic studies and amendments, land supply and demand, image and presentation, access and mobility, environmental considerations, and stakeholder input.

2 the ontario-flora precinct

2.1 where is the precinct?

The study area is approximately 465 hectares of land to the west of the Mildura CDB comprising a mixture of urban, agricultural and recreational areas. The study area is bounded by Fourteenth Street to the south-west, Ontario Avenue to the south-east, and the Murray River bank to the north. To the north-east, the Study Area extends to the area utilised for the sewerage treatment plant and includes a portion of the Ularara Estate where it adjoins Eleventh Street. It is also important to note that the western portion of the precinct forms a key gateway to the City of Mildura for those entering from Merbein and Wentworth.

A key feature of the study area is the inclusion of significant areas of public land including the Old Aerodrome Recreation Reserve, the Bob Corbould Wetland, and other important facilities, including Mildura Landfill. The privately owned Mildura Golf Club also occupies a significant portion of this land. A 100 lot residential subdivision has recently been approved on this site. There are also existing areas of residential development of various densities in the eastern and northern sectors of the precinct. There are a number of vacant land parcels to the immediate west of the Golf Course.

Figure 1 Study Area



2.2 role of the precinct at mildura's edge

The precinct plays an important role both as a gateway and as a transition area within the wider urban context of Mildura. Flora Avenue, together with Eleventh Street, currently serves as the key arterial route to the west. At the intersection with the Fourteenth Street road reserve, the alignment of Flora Avenue skews off from the more formal grid pattern of Mildura's urban centre. This location clearly marks the transition from 'rural' to 'urban' and serves as the western gateway.

Currently, this gateway does not respond appropriately to its function. Much of the land in this area appears degraded and is poorly presented. This land is a combination of public and private land, with much of it is affected by flooding which constrains development of the land. The large area of road reserve at this intersection also appears degraded. Signage and associated infrastructure is limited and there is little coherence between plantings on the roadsides, despite the area having clear potential to form an attractive and definitive entrance to the city of Mildura.

The appearance of the wider Ontario-Flora precinct also contributes to the image of Mildura and development in this precinct will impact on perception of the City. This is particularly true of development visible from Flora Avenue.

Another key role played by this precinct is as a 'transitionary' area between the urban core and the Murray River. The river adjacent to this precinct has a much more natural function, unlike the more developed 'riverfront' areas associated with the CBD. Housing at conventional residential densities runs up to Flora Avenue, but beyond this the development of the land lessens in intensity, with low density residential and agricultural. The area to the west of the study area within the bend of the river accommodates some additional recreational uses and provides numerous access points to the river. Eleventh Street forms one of the key access points to the Murray River within Mildura.

2.3 how will the precinct evolve and be differentiated

This area is arguably the 'greenest' place within the Mildura Township. Given the proximity to the Murray River, the precinct has an attractive landscape character with extensive vegetation cover, public open spaces and contributory areas including the well landscaped Mildura Golf Course. However, development to date has not taken advantage of the environmental and scenic quality nor the tourism potential of the Precinct's 'green assets'.

The precinct needs to recognise and protect these important green spaces and environmental features. However, there is scope to also activate this land and to make appropriate use of underutilised spaces including development on private land. Activation and sensitive development can assist in the on-going preservation of these spaces and improve the image of this important setting.

The precinct should be positioned as a 'green' precinct, both to reflect the presence of extensive planting and ecological systems within the area but also the need for sensitivity in the development process to the constraints present due to these environmental assets. In particular, this study sees the opening up and sensitive placement of paths around the Lake Ranfurly area, the development of a high quality, environmentally sensitive housing development adjacent to the Golf Course and the activation of land west of Flora Avenue with appropriate activities.

It is therefore the environment which will be the defining factor in both how the precinct will evolve and also in how it will be differentiated from other areas of Mildura.

To date there have been multiple masterplans proposed and/ or approved within the precinct but little, if any, co-ordination of different visions within the precinct. On this basis, this UDF seeks to create and promote a Vision which ensures a sensitive blending or co-operation between the masterplans for different parcels within the study area.

3 what is an appropriate future for the precinct?

The key influences and drivers for change in the Ontario-Flora precinct have been identified and discussed in Part B of this report. These influences form the strategic basis to consider an appropriate future for this area. The following is a summary of key influences.

- Previous ad hoc development approvals, in particular the approval of a private 100 lot residential subdivision on publicly zoned land outside the residential growth boundary identified in the Mildura Structure Plan.
- Pressure from landowners for rezoning of their land to allow for more intensive residential development. This particularly relates to the undeveloped land to the east of Flora Avenue and to parcels of land west of Flora Avenue including the area currently zoned for farming purposes.
- Previous panel reports have assessed prior rezoning requests and have offered commentary on the appropriateness (or not) of such rezonings and highlighted the importance of strategic justification.
- Community feedback has strongly influenced this process, in particular relating to the provision of additional access roads both around the perimeter and across the Old Aerodrome Reserve.
- The proximity to the Murray River creates a number of drainage and flooding issues for land within the precinct which constrain or affect development.
- The Mildura Planning Scheme also has a strong influence on the future of the precinct, both through State Government policy relating to, among other things, the protection of environmental assets, and through local policy regarding appropriate development forms and opportunities. The future of the precinct is also affected by the fact that much of the land within the precinct is currently shown as lying outside the 2030 residential growth boundary, a situation which has influenced past commentary on the appropriateness of development in the area.
- The precinct's position as a key gateway to Mildura also strongly influences both the future form and appearance of the area but also provides a strong impetus for investment in the area to ensure an appropriate image is conveyed upon arrival at this major regional centre.

3.1 key recommendations

Having regard to the above and based on a thorough analysis of the precinct and in response to key community concerns, this study has determined the following key recommendations.

- That Council undertake the rezoning of non-floodprone land east of Flora Avenue to allow development at conventional residential densities.
- That Council recognise the important transitional role of land to the west of Flora Avenue and protection of environmental values of the Murray River.
- That the scale, intensity and form of development accommodated within the study area reflect the transition between 'urban' and 'non-urban' areas.
- That Council encourage appropriate use of the land to the west of Flora Avenue provided there is no negative impact on the ecological functions of the land.
- That Council acknowledge the current lack of, and the importance of, the development of appropriate access links, pedestrian and cycle, as well as vehicular, within the precinct.
- That Council protect and develop appropriate access to Lake Ranfurly, with future connections to the landfill site (once use is complete) also implemented.
- That new urban uses within the study area are consistent with the approved Vision and Objectives for the overall area and individual precincts.
- That Council embark upon a program of public works to the Flora Avenue corridor to enhance the appearance, image and effect of the western city entry.
- That Council undertake the application of appropriate rezonings and overlay controls and alteration to the residential growth boundary to achieve the Vision outlined within this report.

4 vision

4.1 overall vision

The overall vision for the Ontario-Flora precinct is:

"To create a well connected precinct which accommodates moderate development which responds to, and takes advantage of, the precinct's environmental and cultural attributes and township position. The precinct will be developed and revitalised to form a key 'green' transitionary area within the wider landscape which will serve as an appropriate gateway to Mildura."

The features which should define the precinct over the next 20 years are as follows:

- Development and protection of the key environmental assets in proximity to the precinct. This includes the Murray River and Lake Ranfurly, but also the Old Aerodrome Reserve, the Mildura Golf Club and the wetlands. These areas will all be developed in ways appropriate to their particular characteristics but will offer increased access to the general public and incorporate engaging signage and educational opportunities.
- Emphasis within the precinct will focus on both formal and informal recreation within these 'green' spaces. This includes the implementation of the Old Aerodrome masterplan and the introduction of an extensive new network of pedestrian/ cycle paths which link the existing riverside tracks to the various 'green' spaces within the precinct, including (in the longer term) the Mildura Landfill.
- Based on the background analysis and stakeholder consultation, the introduction of increased residential densities within the study area in the future is recommended. Portions of undeveloped land within the precinct have both excellent proximity to the Mildura CBD and other important health and recreational facilities, but also offer an opportunity to increase the availability of high quality residences that may not be available in other new development precincts.
- Any new development in the area will be high quality housing along the 'park edges' which responds to the context not only by orientation and siting, but also be the incorporation of sustainability measures and generous landscaping. New dwellings in this precinct will reflect the contemporary design and landscape setting of the approved Golf Club subdivision more

than a conventional suburban development. While most lots will be of a conventional residential size (600-800sqm) ideally some medium density development will occur immediately adjacent to the Golf Club. These dwellings would cater to those seeking smaller houses in close proximity to services and facilities, including retirees.

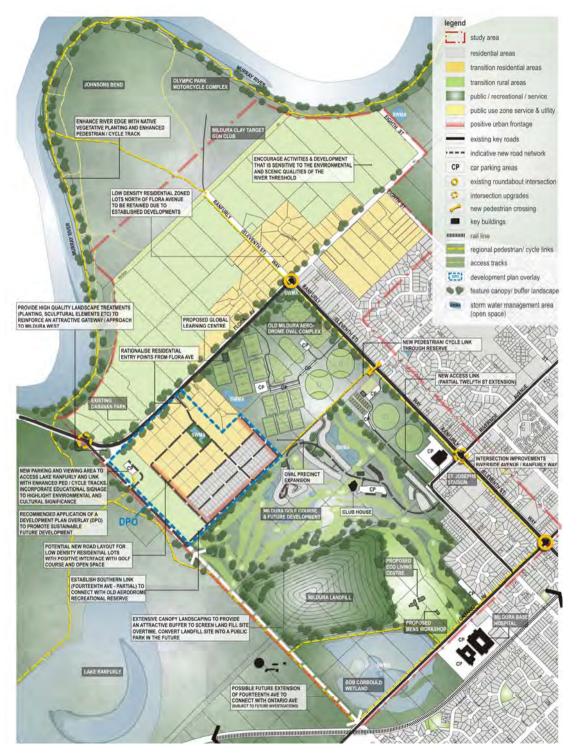
- The strengthening of the definition between the 'urban' and 'non-urban' areas is strongly recommended. This strengthening will improve legibility of the Mildura township as a whole and will also assist in defining the western entrance to the town. This strengthening will also support the protection of the important environmental asset that is the Murray River.
- The development of appropriate signage and landscaping treatments to define and improve the western gateway. The land around the gateway will be activated, and while physical development will be limited due to flooding constraints, the land will be restored to a degree by the increased uses possible under the recommended zoning.

4.2 key objectives

The key objectives that underpin this vision are:

- To ensure an attractive western gateway to Mildura's urban area, primarily by public realm improvements and maximisation of the landscape setting, but also through controls over built form along Flora Avenue.
- To create a more definitive western city edge and ensure an appropriate transition in both building form and intensity of land use adjacent to the Murray River. Encourage the definition of Flora Avenue as this 'edge'.
- To utilise the existing positive environmental characteristics and the approved 'resort style' golf club development to define a 'precinct' of quality housing of various densities in a recreation/ leisure/ landscape setting.
- To improve access and connections within the precinct including links to Lake Ranfurly and the Murray River.
- To optimise the potential of elevated land east of Flora Avenue, given the proximity to services and facilities but also limit the impact of flooding on housing and to vary residential densities to complement and pay for urban infrastructure improvements.
- To ensure a positive and mutually beneficial interface between the Recreation Reserve and the Golf Club areas and adjoining urban land.
- To minimise the impact of and to soften the interface with the Mildura Landfill in the short term and encourage the appropriate transition in use and appropriate integration of the land with the existing 'green' uses in the medium to long term.
- Support the continued expansion and development of the precinct's important recreational assets.

Figure 2 Urban Design Framework Plan



In order to clearly articulate this preferred future, the precinct has been divided into three distinctive sub-precincts. These areas reflect certain land use and development typologies within the overall study area (see Figure 3). The areas are defined as follows:

- Precinct 1: urban transition;
- Precinct 2: green centre; and
- Precinct 3: park edge and residential.

An explanation of the characteristics of each of these precincts and a set of more detailed precinct based objectives and strategies have been developed to support the realisation of the overall vision for the area.

Figure 3 Precinct Plan



4.3 precinct 1: urban transition

This precinct represents the land which forms a buffer between the 'urban' areas of Mildura and adjacent environmental assets. Within this Study Area, important assets include Lake Ranfurly to the south and the Murray River to the north and west. The parcel of land adjacent to Lake Ranfurly which is severely constrained by flooding has been designated as a transition area, as has all the land located west of Flora Avenue.

4.3.1 key issues

The analysis of the study area identified the following key issues for the urban transition precinct:

- The existing configuration and boundaries of zones within this precinct is irregular with boundaries generally reflecting the arrangement of overlays related to flooding rather than land parcels.
- Development within the area has occurred in an ad-hoc manner, with a significant variations in size of the land parcels accommodating residential dwellings.
- While some of the adjoining land has been used (formally and informally) for farming, most of the land within the Study Area has been cleared but remains unused.
- The land within this precinct is proximate to the Murray River and is largely surrounded with open land to the north and south and residential development to the east.
- Given its proximity to the Murray River, the precinct possesses significant environmental qualities and sensitivities.
- The topography of the area is generally flat, and a majority of the land is prone to flooding.
- It has been identified that there is a rise in the land generally where the existing Farming Zone is located. Rises such as this, in close proximity to riverine environments, sometimes contain aboriginal artefacts. This is reflected in the Aboriginal Heritage map seen in section 9.3.
- Existing land zoned LDR within this precinct has mostly been taken up with recent development and/ or has subdivision approval. There are few vacant lots which are yet to be developed.

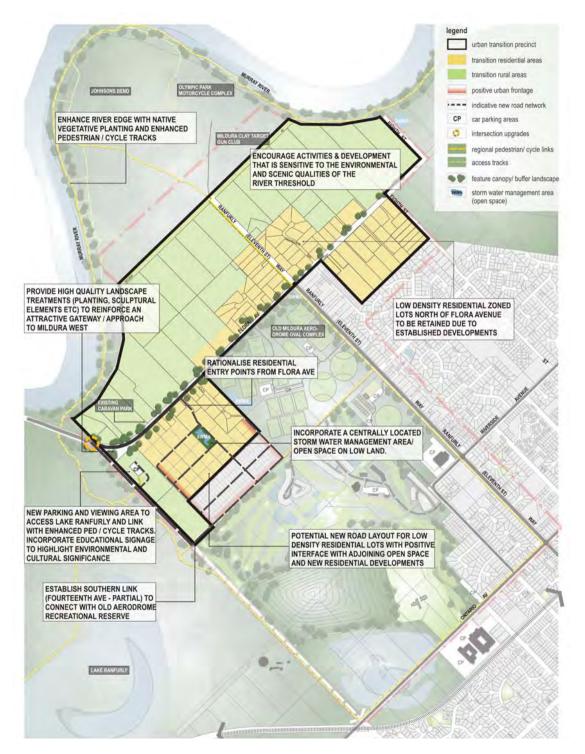
- Flora Avenue currently serves as a key entry road from Merbein, Wentworth and areas beyond those settlements to the west. As such, this precinct offers the opportunity to clearly announce the Mildura's western approach and departure point as an attractive gateway.
- There is pressure from land owners within precinct this to develop land for low density residential use, in particular to develop land currently zoned for farming which is no longer functional as agricultural land.
- The current Urban Floodway zoning of this area restricts optimal use of the land. While flooding constraints obviously exist which must guide development, currently uses are also severely restricted resulting in unused and degraded land.

4.3.2 preferred future

Having regard to the above, the preferred future for this area is identified as follows (Refer to Figure 4):

- To promote an urban transition towards the Murray River and river environs;
- To establish Flora Avenue as an attractive entry road into Mildura;
- To protect the environmental values of the riverine environment and encourage the rehabilitation of existing degraded land;
- To accommodate development forms that provide a sense of openness and a strong presence of native canopy vegetation;
- To allow the maintenance of rural activities such as small scale farming on the land without compromising the scenic and environmental qualities;
- To establish the primary western boundary for conventional residential development;
- To maintain the extent of low density residential development but realign zoning to reflect existing development, property boundaries and elevated land;
- To promote complimentary activities such as tourism focussed development, plant nursery, produce sales and informal areas for recreation;
- To strengthen uses which respond sensitively to the cultural and environmental values of the land;
- To establish an appropriate transition between any areas of residential development (at any density) and the sensitive environs of Lake Ranfurly; and
- To increase the awareness of the environmental values of Lake Ranfurly.

Figure 4 Urban Transition Precinct Plan



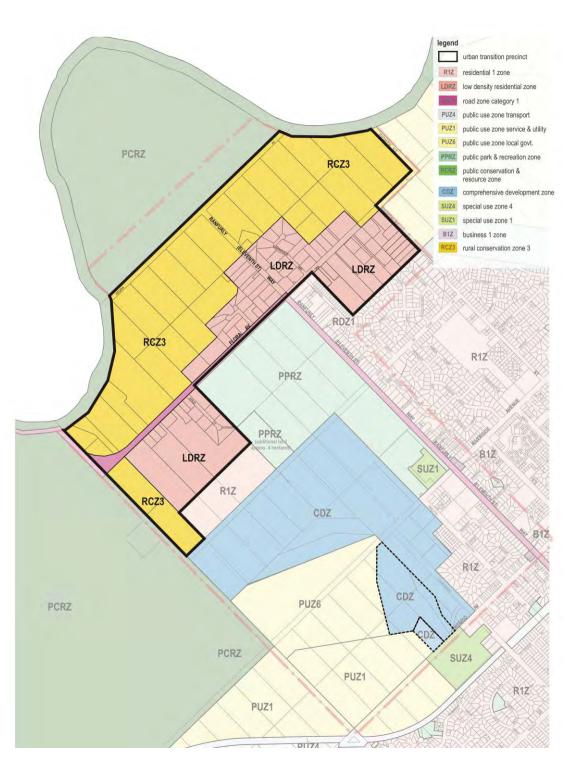
4.3.3 strategies

The following strategies have been devised to achieve the objectives for the Urban Transition Precinct:

Land Use

- Implement a zoning regime that recognises the alignment of property boundaries and areas affected by Overlays.
- Rezone existing land zoned Urban Floodway and Farming Zone, north of Flora Avenue to Rural Conservation Zone. A new schedule to this zone (Schedule 3) should be developed to ensure that development in this zone responds to the environmental assets of the area.
- Land which was previously zoned Urban Floodway must have a Flooding Overlay applied to ensure that development on the land is in accordance with the constraints of the land.
- Ensure that the minimum lot size specified within the schedule to this zone is a minimum of 4 hectares to ensure that the land does not function as a de facto Rural Living Zone.
- Support small scale farming activities to occur on Rural Conservation Zone land and encourage activities which respond to the cultural and environmental values of the land such as tourism, plant nurseries, produce sales, informal recreation etc.
- Discourage intensive residential development on land prone to flooding and areas with significant environmental and/ or cultural qualities.
- Discourage non-compatible uses from locating in the precinct that may degrade the river environment and water quality.
- Support low density development to occur along key roads and in areas on higher ground.
- Review and update the 2030 residential growth boundary as required.
- Prepare a Development Plan Overlay to guide future development to the east of Flora Avenue, and ensure this includes private land adjacent to Lake Ranfurly.
- Consider the acquisition of a small parcel of land immediately adjacent to Lake Ranfurly to accommodate a carpark for those utilising pedestrian and cycling tracks and the provision of education/ interpretation facilities. Revegetation of this area should also be undertaken.

Figure 5 Urban Transition Land Use Plan

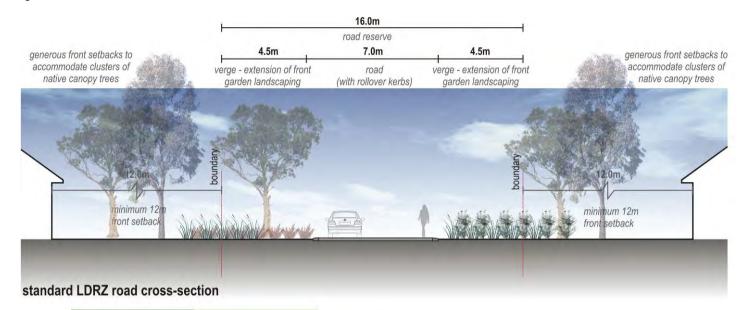


Urban Design

- Improve the appearance of the western gateway to Mildura through extensive native canopy planting along Flora Avenue. Planting of trees should be clustered within the road reserve rather than a formal alignment.
- Encourage planting of canopy trees to occur within generous front setbacks of low density residential lots fronting Flora Avenue.
- Establish an attractive entry gateway statement through artwork, signage and landscape to demarcate the western approach into Mildura.
- Establish a partial road link within the Fourteenth Street reserve to assist in unlocking new residential land to the east of Flora Avenue.
- Establish a roundabout treatment at the Fourteenth Street intersection with Flora Avenue and utilise this island to display appropriate signage and/ or artwork to denote the 'gateway'.
 Vegetation should also be used to ensure the 'green' character of this gateway area is reinforced.
- Enhance the river edge environment with extensive native and indigenous planting.
- Build on the existing cycling and pedestrian paths along the river by increasing connections to Lake Ranfurly and down to the Mildura Landfill and the Bob Corbould wetlands.
- Establish circulatory bicycle routes along key roads including Fourteenth Street (road reserve), Ontario Avenue and Eleventh Street.
- Limit the number of vehicle entrances accessing the new residential area (west of the Golf Course) to minimise traffic impacts on Flora Avenue.
- Ensure new roads within low density zoned lots are aligned in a grid formation and along property boundaries. This will assist in establishing efficient development blocks that allow convenient vehicle and pedestrian movement. (Refer to Figure 6: recommended LDRZ road cross section)
- Ensure the alignment of new roads provide a positive frontage to public open spaces, golf courses and exposed edges.

- On low density lots, support single storey buildings with a domestic appearance. Buildings should incorporate materials familiar with surrounding residential stock and employ pitched roof styles.
- New development should provide articulated frontages/ side elevations to the streets. Car
 parking and garages should be recessed from the street and behind the building frontage.
- Ensure all buildings incorporate generous front setbacks to allow for canopy vegetation within front gardens.
- Establish a landscaped car park facility and viewing area to the north of Lake Ranfurly. This may require the leasing of a small portion of privately owned land. This facility could be developed in conjunction with the State or even Federal Government.
- Encourage a strong canopy landscape that will sit above the low scale residential buildings within the precinct.
- Acknowledge the importance of drainage management and servicing of low lying land.
- Ensure storm water management areas and retention basins are designed to appear naturalistic in presentation. The profile of new basins should be organic in shape and supported by extensive vegetation.
- Adopt the principles of ESD including Water Sensitive Urban Design in the planning of all new residential areas. Particularly encourage street design that incorporates swales, roll over kerbs, water retention and significantly public landscape.
- Ensure any additional development (residential or other) that occurs west of Flora Avenue is subservient to the landscape character of the area.

Figure 6 Urban Transition Precinct - LDR Street Section





(to include native grasses and shrubs)

4.3.4 implications and issues

The above strategies and directions for the urban transition precinct will generate a series of implications that need to be appropriately considered. The implications are as follows:

loss of farming zoned land

The proposed rezoning of a parcel of farming land to Rural Conservation Zone may see development occurring on this land which is not agricultural. It is noted that the selected zoning does not preclude the continuation of farming activities within this area, with agriculture a section 2 use under the Rural Conservation Zone. Given the small size, isolated location and proximity to residential development of this parcel, it is unlikely that farming uses will continue in the long term. More appropriate uses could be contemplated for this land, with a wider range of options available under the suggested zoning.

impact on aboriginal cultural heritage

Much of the area in question has been identified as having potential aboriginal cultural heritage, as is common along waterways. As the map in section 9.3 demonstrates, much of the land will need to be assessed for cultural heritage as part of any planning permit process. It is considered that this should be sufficient to address any impact.

flooding and river threshold

Rezoning of the land from Urban Floodway Zone to Rural Conservation Zone removes many of the constraints associated with use of this land. Given the strong policy imperative at both State and Local level to both protect water systems and their flows and protect human life and property, it is imperative that any such rezoning only be undertaken in conjunction with an associated application of a Floodway Overlay to the land which was previously zoned UFZ. The application is also consistent with the preferred future of this precinct, as the UFZ is to be applied to *urban* areas only, where the FO is to be applied to both *urban and rural* areas. This would be consistent with the application of a *Rural* Conservation Zone to the land. It is noted that this overlay will also be applied to the small areas of LDRZ which were previous zoned UFZ.

existing uses

There are a number of existing uses within the area proposed for rezoning which may be affected. The reorganisation of the boundary of the Low Density Residential Zone to reflect the lot boundaries will result in some dwellings being located outside this zone and within the RCZ. However, the three dwellings which will no longer be in the LDRZ are still allowable under the new zoning regime. It is further noted that there are additional existing dwellings which are currently located within the UFZ which are prohibited but obviously enjoy existing use rights. While the existing caravan park will become a non-conforming use ('Accommodation' is prohibited under a RCZ) this facility will be categorised as an 'existing use' under Clause 63.01 of the Mildura Planning Scheme, where the definition is as follows:

An existing use right is established in relation to use of land under this scheme if any of the following apply:

- The use was lawfully carried out immediately before the approval date.
- A permit for the use had been granted immediately before the approval date and the use commences before the permit expires.
- A permit for the use has been granted under Clause 63.08 and the use commences before the permit expires.
- Proof of continuous use for 15 years is established under Clause 63.11.
- The use is a lawful continuation by a utility service provider or other private body of a use previously carried on by a Minister, government department or public authority, even where the continuation of the use is no longer for a public purpose.

4.4 precinct 2: green centre

This area consists of land parcels within the core of the wider precinct which are currently, or will be, developed with either public or private open space. The area includes the Old Aerodrome Recreation Reserve, Mildura Golf Club, the Mildura Landfill (which will revert to public open space at the end of its lifespan) and part of the Bob Corbould Wetland to the south of the precinct.

4.4.1 key issues

The analysis of the study area identified the following key issues for the green centre

- A key issue within this precinct is the current zoning regime, which is inappropriate. In particular, this applies to the Golf Course and the St Josephs School (stadium site), which are currently in a Public Parks and Recreation Zone. We also note that there is an isolated pocket of land immediately adjacent to the Ontario-Flora Precinct that is zoned for farming.
- Another key issue is the Old Aerodrome Masterplan (2009) which has recently been adopted by Council. It is noted that this masterplan was prepared in close consultation with sporting groups. As a document adopted by Council, this framework must consider the key directions and recommendations of this masterplan.
- Another of the key issues relates to the movement and access of vehicles through and into this recreation area. Currently, vehicle access is via a limited number of entry points from Flora Avenue and Eleventh Street which contributes to congestion within the precinct.
- Council has also recently issued a planning permit for the staged development of a 100 lot residential development on the privately owned Mildura Golf Course, and associated changes and upgrades to the course and facilities. It is noted that this Golf Club area currently lies beyond the 2030 residential growth boundary shown found at Clause 21.04 of the Mildura Planning Scheme.
- Furthermore, many of existing pedestrian and cycling paths within the precinct and the Old Aerodrome Oval complex are disconnected. While the masterplan for the Oval complex proposes a perimeter link, there are limited external links to the broader area including existing and anticipated residential areas. There are opportunities to provide options for enhanced pedestrian and cycling access.
- This plan must also consider the future recreational needs of Mildura residents, particularly in relation to the recommendation in the adopted Mildura Sporting Reserves Master Plan

Strategy that an additional 10 hectares of land be acquired to accommodate any future recreational needs.

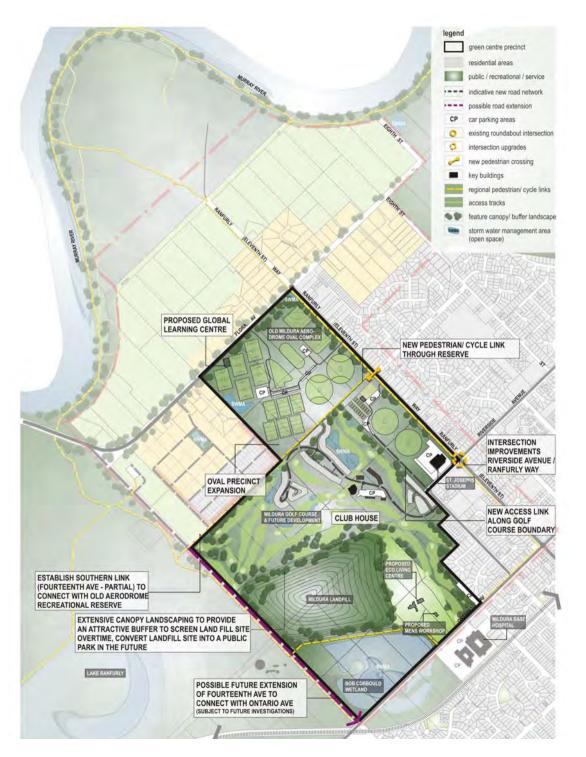
- Future educational needs within the precinct need to be analysed, in relation to both the
 potential future expansion or development of St Josephs School and the associated safety of
 movement for students within the precinct.
- Established canopy vegetation within the Golf Course land presents an attractive environment that can also be seen in the Old Aerodrome Recreation Reserve. However, this attractive canopy vegetation needs to be further enhanced, particularly around the existing Mildura Landfill.
- According to Council policy, urban development should be located a minimum 200m away from the Mildura Landfill site. The transition from this landfill site to recreational areas and residential areas must be carefully managed.
- A number of developments have been proposed on both Council and Lower Murray Water land adjacent to the Mildura Landfill. Many of these will be community and non-profit endeavours, however, there is likely to be potential for associated businesses to operate within this area under leasehold. The current zoning of the land for Public Use restricts profit generating uses on the land.
- The area has a number of issues relating to Lake Ranfurly which need to be addressed, including the presence of a critically endangered species, the currently lack of access to the area and lack of active use. Due to these factors the area has become somewhat degraded. There are also flooding issues associated with the lake and cultural heritage issues. Further to this, the current lack of water in the lake has resulted in the release of sulphur which may cause amenity impacts for residents.

4.4.2 preferred future

Having regard to the above, the preferred future for this area is identified as follows (Refer to Figure 7):

- To retain its recreational focus as a precinct with limited urban development (with the exception of the recent approval of residential lots within the Golf Course land). The other exception to this will be the community and associated uses which are proposed for development adjacent to the landfill.
- To improve accessibility throughout this precinct with pedestrian and bicycle connections to the surrounding urban development and open spaces.
- To improve the presentation of the precinct through increased surveillance of public spaces.
- To improve pedestrian safety for those using the recreation reserve.
- To support the approved development of high quality residential forms within the Mildura Golf course, taking advantage of attractive views, proximity to open space and the Mildura CBD.
- A softened landscaped perimeter around the Mildura Landfill to assist in screening distant and local views. In the future, consider the landfill site to be converted into a public park with the appropriate capping and significant landscaping.
- The development of a hub of community, not-for profit and associated uses in the southeastern corner area of the precinct, close to Ontario Avenue.

Figure 7 Green Centre Precinct Plan



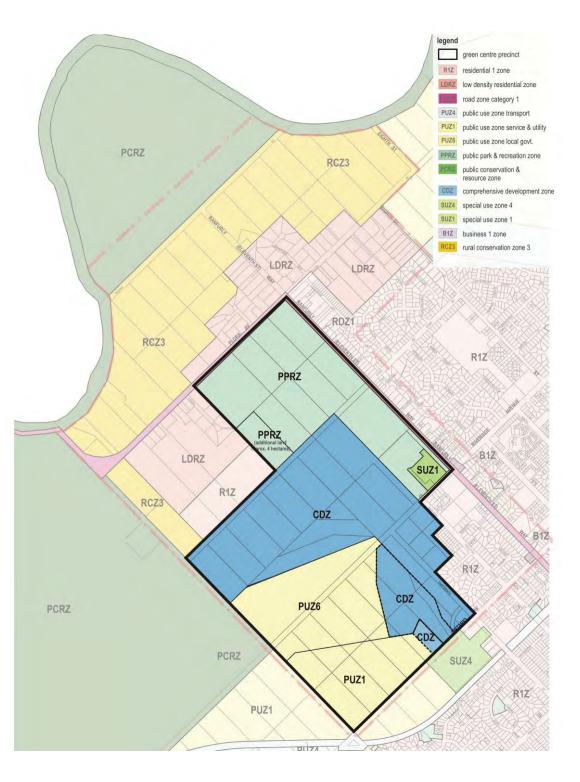
4.4.3 strategies

The following strategies have been prepared to deliver the objectives for the green centre precinct:

Land Use

- Expansion of the Old Aerodrome Oval Recreation Reserve to occur to the south and form a consolidated (rather than stepped) boundary. Apply a PAO on private land to ensure the recreation precinct has the ability to expand and flexibility to accommodate a range of sporting field requirements.
- Support the rezoning of the Golf Course land to a Comprehensive Development Zone, reflecting the approved development and controlling future development.
- Support the rezoning of land containing the St. Joseph School site to an appropriate zone. In this case Special Use Zone 1 is supported as this already applies to other land within Mildura owned by St Josephs.
- Support the rezoning of the adjoining parcel of Farming Zoned land to Public Conservation and Resource Zone, in line with the surrounding zoning.
- Consider a Comprehensive Development Zone to be applied to the east of the Mildura Landfill site to reflect the concept plans outlining a proposal for an Eco Centre development, and other proposed development within PUZ land.
- Support community based uses and increased activation within the Old Aerodrome Oval Recreation Reserve.
- Support the long term rezoning the Mildura Landfill site to Public Parks and Recreation Zone.

Figure 8 Green Centre Land Use Plan



Urban Design

- Establish a direct pedestrian and bicycle link through the Old Aerodrome Recreation Reserve (from Eleventh Street) to connect with Lake Ranfurly.
- Allow for safe and direct pedestrian links to the Old Aerodrome Recreation Reserve from surrounding residential development. This will include the signalisation of the intersection of Riverside Avenue and Eleventh Street.
- Council is also strongly encouraged to work with VicRoads to investigate the potential installation of a signalised pedestrian crossing to the north of Dyer Avenue. This will allow for a safe pedestrian to access the Old Aerodrome Recreation Reserve and assist in calming traffic along Eleventh Street.
- Undertake further detailed investigation for the full connection of Fourteenth Street from Flora Avenue towards Ontario Avenue to the south. This investigation will need to address issues such as funding, environmental considerations, matters of cultural heritage and flooding constraints.
- Establish a strong green buffer along the interface between the Mildura Landfill and surrounding areas. Encourage extensive plantings of native shrubs and canopy trees to ensure an attractive outlook to the landfill site. Canopy plantings at the landfill site will also ensure that views of the landfill will be screened from many areas. The establishment of a perimeter of canopy planting is important as trees will need time to develop as the landfill increases in size.
- Enhance and maintain the Bob Corbould Wetland Reserve as an attractive entry feature into the precinct. Support the ongoing maintenance of this wetland and the establishment of a future loop link around this area, tying in with Lake Ranfurly
- Ensure established vegetation is retained and is integrated with the layout of new development within the wider precinct.
- Ensure that pedestrian and cycling links along the Fourteenth Street road reserve and in the proximity of Lake Ranfurly are formal in nature, with appropriate lighting provided to avoid the use of the area in an informal manner which may jeopardise the environmental values of the area. Boardwalks should be constructed to avoid use of the tracks by motorcyclists.

- Establish high quality, useable public open spaces that are highly visible, accessible and safe.
- Support high quality residential development to occur within the Mildura Golf Course. Ensure new developments are in accordance with *The Mildura Golf Club Resort Design Guidelines, June 2008.*

4.4.4 implications and issues

The objectives for the green centre precinct and strategies to achieve such will generate a series of implications that need to be appropriately considered. The implications are as follows:

approved mildura golf course development

Mildura Rural City Council has recently issued a permit for the development of a 100 lot housing development on the privately owner Mildura Golf Club land. This approval has a number of implications which this plan has attempted to either resolve or accommodate. Of primary significance is that the land on which this development has been approved is currently zoned Public Parks and Recreation, despite its private ownership. The land is also beyond the existing residential growth boundary.

It is important within this plan that the golf club remains primarily an area of green open space and, as such, there should be no further residential development on the site. An extensive package of application documentation was prepared in the course of this approval and it is therefore recommended that this land be rezoned to Comprehensive Development Zone, which allows Council to 'lock in' the approved development. It is further noted that recently approved rezonings which have similar resort style/ golf club residential development in Victoria have favoured the Comprehensive Development Zone.

This framework also proposes residential development adjoining the western border of the Golf Club, separated by an access road. The plan has considered this carefully and has required setbacks from the fairway to be incorporated. There will be a minimum separation of 25m which will incorporate an additional row of canopy trees and low fencing which will assist in avoiding conflict between golfing activities and adjoining residential uses. This separation will be far more extensive that can be seen in the south-east of the precinct.

While access roads are proposed along the boundaries of the golf course these roads do not connect with the access road within the Golf Club and the Golf Club owners have indicated that this development is intended to operate as a 'closed' resort style development which will not accommodate through accessways. There will, however, be pedestrian and cycling connections from the proposed path along the northern boundary and the internal accessways within the Golf Club.

residential growth boundary

The inclusion within the plan of residential development at conventional densities will require a shift in Mildura's residential growth boundary. This is an action which Council may wish to pursue. In particular it is noted that under the Mildura Planning Scheme, the LDRZ is denoted as Clause 32.03 which is classified as a 'residential' zone, as is all of Clause 32. Non-urban residential zones are categorised in the planning scheme under Clause 35. As such, it is suggested that Council consider a reassessment of the residential growth boundary to reflect the intent of the zones. While it is acknowledged that setting the residential growth boundary at Flora Avenue excludes some land to the north which is zoned LDRZ, this land is not envisaged as part of the urban settlement of Mildura. It is not suggested to backzone this land and as such it will remain an anomaly, as it is suggested that, should Council decide to redraw the growth boundary, the new boundary should include areas zoned LDR.

proposed eco living centre

In addition to the approved Golf Club development, there have been a number of initial proposals for a variety of developments on the land adjacent to the Mildura Landfill, in proximity to Ontario Avenue. Currently operations at the landfill are limited to the transfer station, run by Aroundagain, which sorts and recycles much of the garbage delivered to the landfill. However, there have also been a number of other proposals developed for land in this vicinity including an 'eco living centre,' 'men in sheds' development, a development known as the Christie Centre (a proposed tourism/ commercial development) and a car park associated with the hospital. These uses will function on land leased from the water authority (Lower Murray Water) or Council. While these uses will remain primarily non-profit community uses, there is an anticipated demand for some of these developments to incorporate some form of profit generating use, particularly the Christie Centre. These uses would be inappropriate under the current Public Use Zone.

By recommending that this land be rezoned to a Comprehensive Development Zone, in addition to the Golf Club, Council can open up opportunities for this parcel of land to develop a highly effective synergy between community and business ventures. The location of the recycling centre and the proposed eco living centre mean this plan creates opportunities to develop a real 'sustainability' hub that may draw in similar operations. This could also then connect to the key pedestrian and cycling pathways recommended by this plan.

mildura landfill

The Mildura Landfill was expected to have a lifespan of approximately 30 years. However, improvements in recycling rates, due in large part to the actions of the Aroundagain group which runs the transfer station, mean this lifespan is now around 50 years (should Council wish to continue with the landfill in its current location) meaning that landfill is likely to remain for the foreseeable future. It is important to note, in the light of the recent events in the Shire of Cardinia, that the climatic conditions in Mildura mean that the release of methane is not such a threat as garbage does not decompose so rapidly. This plan will not impact on the functioning of the landfill but anticipates the envisaged future where the landfill will be converted to public parkland (subject to appropriate capping measures). The proposed screening vegetation will reduce the visual impact of the landfill while it continues to function.

pedestrian safety

The safety of users of these important green spaces is also a key issue for this area. As such the plan has recommended an increase in the dedicated pedestrians pathways, to complement those included in the Old Aerodrome Recreation Reserve masterplan. It was also important to consider the safety of pedestrian movement from the main residential areas (to the north and east) into the recreation reserve. As such, the plan shows two areas of traffic improvement which will assist in increasing pedestrian safety. Traffic lights are shown at the intersection of Riverside Avenue and Eleventh Street, and a signalised pedestrian crossing is shown across Eleventh Street, just above Dyer Avenue. This will also assist in allowing turning movements from Dyer Avenue into Eleventh Street. Furthermore, the addition of these traffic lights, in association with the proposed roundabout at Fourteenth and Flora, should assist in reducing the speed of traffic along these roads, as vehicles enter the urban area. Student movement from the St Josephs site is relatively dispersed but it is hoped the anticipated upgrade of the intersection of Riverside Avenue and Eleventh Street to a signalised junction will assist in providing safe passage to the nearby shops for students. These signals are expected as part of a negotiated outcome between the developers of the Mildura Golf Club and VicRoads, and will incorporate a turning lane.

mildura remote control car club

The Mildura RC Car Club currently utilises the parcels of land between the Mildura Golf Course and the St Josephs site. While Council have acknowledged that they are a key community group and there is an option of remaining at their current site, it is considered that there are likely to be significant land-use conflicts between this use and the location of approved residential development within the golf course. As a result of this it is considered unlikely that Council will issue the permit required by the club to continue operations in their current position, As such, this report has recommended that the car club be relocated to a more appropriate site. The logical site would appear to be the area to the north of this Study Area where the motorcycle and other forms of racing already operate. There appears to be sufficient capacity in that area to accommodate the car club in a location which could provide a secure long term home for the club. However, the ultimate location of the club will need to be determined in consultation with club members.

5 precinct 3: park edge and residential

This precinct includes existing and anticipated residential land that has a frontage to main streets and is proximate to public and private open spaces including the Old Aerodrome Recreation Reserve and the Mildura Golf Course. These prime locations offer a high level of amenity and a landscape character which sets them apart from conventional residential development areas. While much of the development along Eleventh Street has failed to take advantage of this proximity (potentially due to the wide nature of this roadway), consolidated development in the east of the study area demonstrates a greater awareness of the benefits and advantage of such proximity.

5.1.1 key issues

The analysis of the study area identified the following key issues for the park edge precinct:

- Land within this precinct forms two discrete packages; the land along Eleventh Street and in the east of the precinct (which has been previously developed) and the land proposed for rezoning to the immediate west of the Mildura Golf Course.
- Land within the area proposed for rezoning to R1Z is on elevated ground and is less prone to flooding than much of the surrounding area, particularly to the west. This has been confirmed by the lack of flood related overlays which apply to this portion of land and the clear rise in topography that can be observed on the land.
- These 'park edge' parcels of land are often more valuable land from an urban design perspective given their close proximity to open spaces and attractive outlooks.
- A large parcel of this valuable 'park edge' land remains undeveloped, being the area to the immediate west of the Golf Club.
- There are a limited number of owners of land to the west of the Golf Club, which has potential benefits in co-ordinating future development, infrastructure and linkages.
- Vic Roads has indicated that vehicle access to any residential development proposed to the west of the Golf Club be limited due to potential traffic conflict on key roads, namely Flora Avenue.
- There are a number of existing consolidated developments, particularly around the Golf Course, which have responded to the value of these 'park edge' locations by taking advantage of views and attractive outlook.

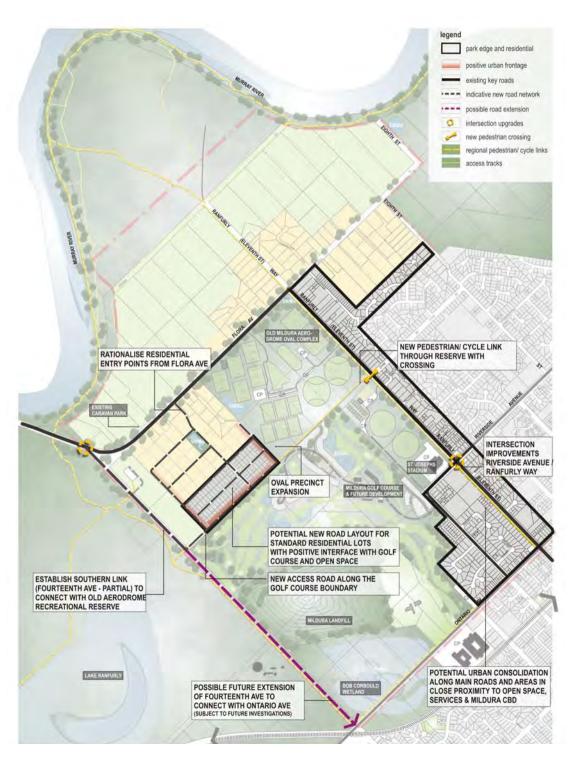
While permits have been granted for low density residential development to the west of the Golf Course, it is unlikely that such development is feasible due to associated servicing requirements. Further to this, it is considered that developing valuable 'park edge' land at lower densities (or in large lot format) does not constitute the most efficient use of this land.

5.1.2 preferred future

Having regard to the above, the preferred future for this area is identified as follows (Refer to Figure 9):

- Consolidated residential development to be accommodated on elevated land proximate to open public and private 'green' spaces. Any development should be of a high quality to respond positively towards the park or golf course edges.
- Consideration will be given to providing some elements of medium density housing or housing which can accommodate more elderly and/ or retired residents in close proximity to recreational and medical facilities.
- Residents of these areas will move around primarily on foot, by bicycle or golf buggy due to the excellent network of paths and proximity to services and facilities.
- Increased densities along the edges of open space will increase the passive surveillance of these areas which is anticipated to lead to improved public safety and reduced incidents of vandalism.
- New development within this precinct will aspire to high sustainability standards and will
 incorporate water sensitive urban design in recognition of their proximity to important
 environmental assets.
- Development of these parcels of land and the shared spaces around them should include appropriate landscaping to respond to the existing character of the Study Area.

Figure 9 Park Edge and Residential Precinct Plan



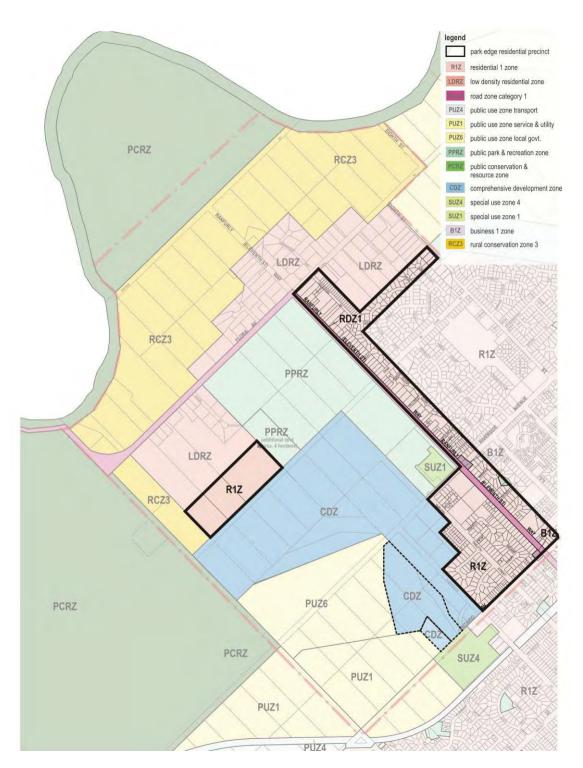
5.1.3 strategies

The following strategies have been prepared to deliver the objectives for the park edge precinct:

Land Use

- Support conventional residential development along parkland and golf course boundary. To
 facilitate this strategy it is recommended that this portion of land rezoned to Residential 1
 Zone.
- To apply a Development Plan Overlay (DPO) to the undeveloped land east of Flora Avenue for proper and orderly development to occur on the land.
- To recognise Flora Avenue as the urban edge of Mildura through a review of the existing residential growth boundary.
- To provide opportunities for the consolidation of residential development with opportunities for a range of housing style and densities.

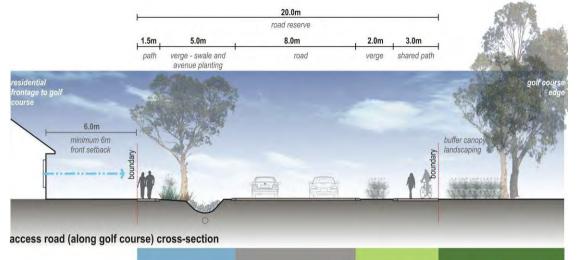
Figure 10 Park Edge Residential Land Use Plan



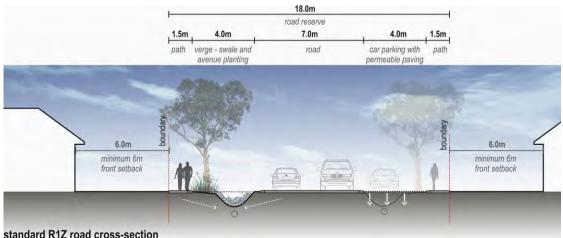
Urban Design

- Support the subdivision of selected parcels of land at conventional residential densities. Ensure the layout of new urban blocks allow for a positive urban interface with public/ private open spaces.
- Establish a partial road link along the north-western golf course boundary to establish a frontage towards the golf course and provide a spatial buffer from course hitting zones. (Refer to Figure 11: recommended access road cross section)
- Establish a street network that allows future connections with adjoining lots to form a cohesive and well connected neighbourhood. (Refer to Figure 11: recommended R1Z road cross section)
- Limit the number of vehicle entrances accessing the new residential area (west of the Golf Course) to minimise traffic impacts on Flora Avenue.
- New development should provide articulated frontages/ side elevations to the streets. Car parking and garages should be recessed from the street and behind the building frontage.
- Ensure all buildings incorporate generous street setbacks to allow for canopy vegetation within front gardens.
- Buildings should incorporate materials familiar with surrounding residential stock and employ pitched roof styles.
- Adopt the principles of ESD including Water Sensitive Urban Design in the planning of all new residential areas. Particularly encourage street design that incorporates swales, roll over kerbs, water retention and significantly public landscape
- Facilitate direct and safe pedestrian linkages from new residential development areas to connect with the Old Aerodrome Recreation Reserve and open fields. This should also include the installation of a pedestrian crossing north of the intersection of Dyer Avenue and Eleventh Street.
- Establish a themed avenue of native plantings along new streets.

Figure 11 Park Edge Residential – Street Sections







standard R1Z road cross-section

5.1.4 implications

The objectives for the park edge precinct and strategies to achieve such will generate a series of implications that need to be appropriately considered. The implications are as follows:

residential growth boundary

The inclusion within the plan of development at conventional residential density will require a shift in the residential growth boundary. This is an action which Council may wish to pursue. In particular it is noted that the omission of LDRZ land from within the residential growth boundary could be deemed to be contrary to the intent of the Mildura Planning Scheme. Under the table of contents for the Mildura Planning Scheme, the LDRZ is denoted as Clause 32.03 which is classified as a 'residential' zone, as is all of Clause 32. Non-urban residential zones are categorised in the planning scheme under Clause 35. As such it is suggested that Council consider a reassessment of the residential growth boundary to reflect the intent of the zones.

demand

Part B of this report contains a more comprehensive assessment of the issue of land supply and demand in Mildura in general, however some brief commentary follows.

While it is acknowledged that the approved residential growth areas within Mildura are located to the south, it is considered that there remains considerable demand for dwellings within the western portion of Mildura. Anecdotal evidence from consultation indicates that the western suburbs are the most popular place to live within the City of Mildura. The combination of close proximity to the CBD and to other services and facilities, along with the attractive environment means houses in this area are in high demand.

It is also envisaged within this framework that the style of housing provided within the land to be rezoned to Residential 1 will be significantly different to that offered in the existing growth areas in Mildura's south. This can be assured by Council through the application of a DPO which will guide the form of development in this area.

The plan proposes a conceivable 100 conventional residential lots be added to Mildura's supply of housing lots. In addition, 36 low density lots will be provided (although it is noted

that the land already has approval for 33 LDR lots and some LDR lots have already been developed along Flora Avenue). This is in addition to the approved lots (100) within the Mildura Golf Course. Given the current take up of residential lots, anecdotal evidence is that there is pent up demand for housing within this area and the recommendation for a different style of housing (and associated price bracket) it is not felt that this rezoning will have a significant impact on the take up of residential land elsewhere in Mildura. This is due to the particular locational and demand characteristics within this precinct.

access and vehicular movement

One of the key issues in the completion of this plan was vehicular movement through the precinct. This was a key concern of stakeholders and of Council, particularly in relation to Eleventh Street. The inclusion of an additional 100 lot subdivision within this precinct will obviously have implications for the traffic movements within the area. However, recent traffic counts conducted in the precinct indicate that the area is likely to have the capacity to accommodate additional vehicular movements.

Any new residential development will require appropriate access. This plan envisages access to the only area proposed for more intensive development via both an existing crossover to Flora Avenue (located slightly to the south of Hood Court) and via construction of a portion of Fourteenth Street. Accessways within this parcel have been proposed to ensure a functional layout and allow easy and appropriate access to all lots. The access to this portion of land east of Flora Avenue has been restricted to just these points as consultation with VicRoads indicated that an additional entry point was unlikely to be supported given the Category 1 status of the road.

flooding and drainage issues

Much of the land in the area is subject to inundation. The extent and frequency of this flooding is the subject of some dispute, nonetheless recent flood modelling by the catchment management authority (CMA) confirms that the land beyond the 'park edge' is subject to inundation. While it has been claimed that Flora Avenue acts as a "levee bank", both the CMA and Council's infrastructure department have confirmed that this is not the case. There are parts of the road which have not been raised to the 1 in 100 year flood level, and this prevents the road acting as a levee. Advice received is that there is more concern about the

development of the land relating to issues of drainage and the need for appropriate stormwater management areas, as the land proposed for LDRZ forms a natural depression, than the impact of flooding.

A drainage basin has subsequently been shown on one of the low density residential lots. Advice was received from Council's infrastructure department that a minimum area of 8000sqm would be required to appropriately manage drainage issues within this area should the wider parcel incorporate conventional densities. Within the park edge development, streets will incorporate water sensitive urban design, as shown in the section included at figure 11. This will ensure appropriate management of drainage from these residential areas. Council should also investigate, in conjunction with the landowner, possibilities for directing water from any residential development in this area into a potential new wetland at the edge of Lake Ranfurly.

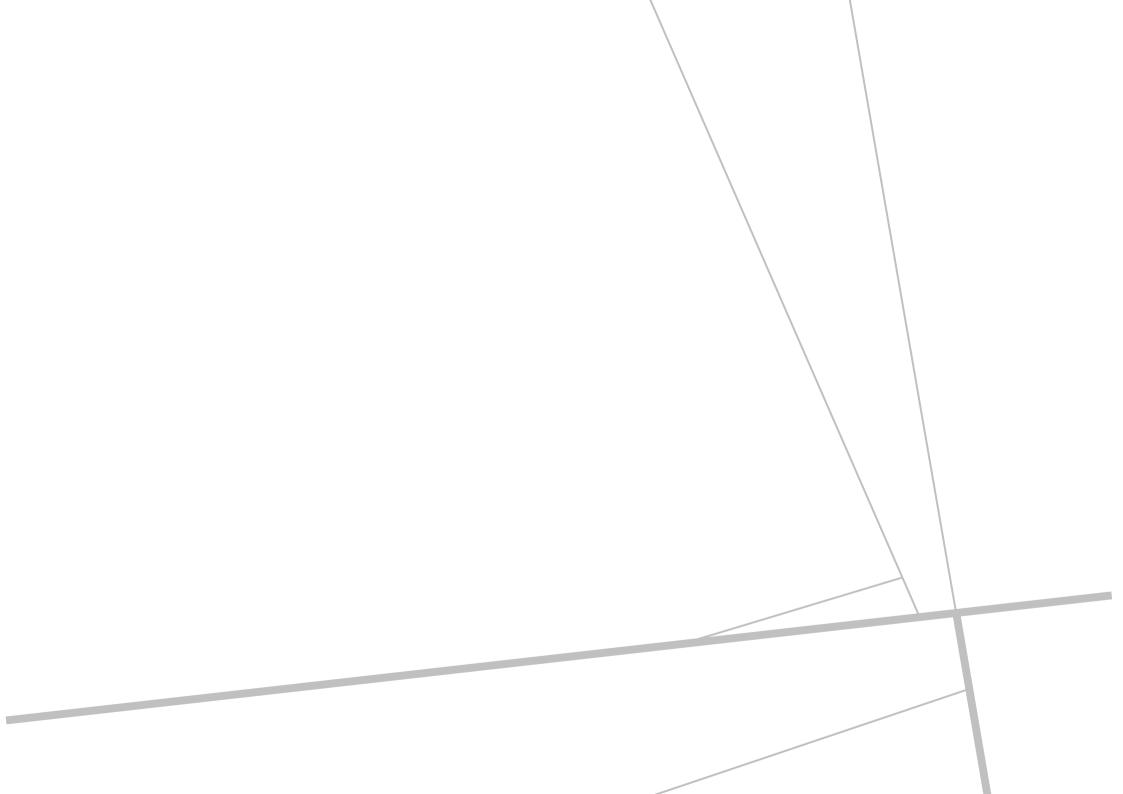
Advice has been sought by the owners of land south of Flora Avenue affected by both the existing Urban Floodway Zone and Land Subject to Inundation Overlay from the Mallee Catchment Management Authority (the relevant local authority). Correspondence provided by the CMA dated 6 April 2010 and 3 June 2010 (included at appendix 3) indicates that they have no objection to both the land affected by the LSIO and the land currently under an UFZ, to the south of Flora Avenue, being rezoned to Residential 1 Zone. This is dependent on the following conditions, specified in their correspondence:

1. Land must be filled to the 1% flood level

2. All access roads must be filled to the 1% flood level; and

3 All dwellings are set at least 300 millimetres above the 1% flood

While it is acknowledged that this is a possible outcome, it is not considered that this is an outcome that is appropriate, particularly given the environmental sensitivities of the area. It is considered that the filling of the land as outlined by the CMA should only occur if it can be creditably demonstrated that there will be no significant changes to the flows of water as a result of these actions. The fill would likely be over 1 meter for large areas of the land south of Flora Avenue and would be in excess of this for the land currently zoned Urban Floodway Zone.



part b: strategic justification

The following section of the report identifies the key elements that will influence the future direction of the Ontario-Flora precinct. These influences each act to exert pressure on the current status of the area and create a framework within which to consider an appropriate strategic response to its propensity for change in the future. The response of the proposed Ontario-Flora Land Use Vision and Urban Design Framework to these varied influences is also discussed.

6 planning policy framework

A variety of planning policies influence the future direction of the study area. The following discussion provides an overview of the key planning policy and strategic planning decisions that influence the study area and the response of this Land Use Vision and Urban Design Framework to the direction within the policy framework.

6.1 state planning policy framework (sppf)

The following table outlines the relevant State Government policies which will influence the future direction of the Ontario-Flora precinct and the response of this plan to the directions and strategies within the Mildura Planning Scheme.

CLAUSE	OBJECTIVES	RESPONSE
Clause 14 - Settlement	The objectives of this clause are to ensure a sufficient supply of land is available for residential, commercial, industrial, recreational, institutional and other public uses and to facilitate the orderly development of urban areas.	It is acknowledged that recent rezonings in southern Mildura have provided the city with the required residential land to accommodate predicted growth. However, this clause also seeks the <i>orderly</i> development of urban areas. The rezoning of developable parcels, within what is essentially an urban area, in closer proximity to the town centre than the land to be developed in Mildura south, is considered to accord with the orderly planning encouraged by this clause. In addition, this plan seeks to acquire additional land for recreational uses to ensure a sufficient future supply of recreational land prior to the development of that land for residential uses

CLAUSE	OBJECTIVES	RESPONSE
Clause 15.01 - Protection of catchments, waterways and groundwater	The objective of this clause is to assist the protection and, where possible, restoration of catchments, waterways, water bodies, groundwater, and the marine environment. Under this clause planning authorities should work closely with catchment management authorities and other relevant bodies to ensure protection.	The rezoning and application of overlay controls to the land adjoining waterways and bodies within the precinct is in accordance with this State policy. The application of a 'conservation' zone sends a clear signal that the ecological values of that land are the primary concern of the Planning Authority. However, the removal of the Urban Floodway Zone and its replacement with the Floodway Overlay means that, while physical development of the land will continue to be guided by the potential for flooding, a wider range of uses will be possible on the land which is expected to assist in promoting the restoration of this currently degraded land.
Clause 15.02 - Floodplain management	This clause seeks to assist the protection of life, property and community infrastructure from flood hazard, the natural flood carrying capacity of rivers, streams and floodways, the flood storage function of floodplains and waterways and also protect floodplain areas of environmental significance. Under this clause all areas affected by 1 in 100 year floods must be shown on planning scheme maps.	This plan continues to reflect the possibility of flooding by ensuring all land currently covered by LSIO or FO or UFZ continues to be protected by appropriate planning controls. It is suggested, however, that the updated flood modelling recommended by in the Panel Report on Amendment C28, be more actively pursued by Council to ensure that the distribution and extent of the LSIO and FOs reflects the latest flood data.
Clause 15.09 - Conservation of native flora and fauna	To assist the protection and conservation of biodiversity, including native vegetation retention and provision of habitats for native plants and animals and control of pest plants and animals, this clause contains a number of overarching principles that should guide development.	This plan has been developed in accordance with the principles of this clause. It is noted that the activation of Fourteenth Street has been shown on the plan only as a recommendation for investigation due to the potential for this link to impact on the existing population of the endangered Hooded Scaly-Foot Lizard.

CLAUSE	OBJECTIVES	RESPONSE
Clause 15.10 - Open space	 This clause is intended to promote the creation of a diverse and integrated network of public open space commensurate with the needs of urban communities and rural areas. Under this clause Planning and responsible authorities should ensure that open space networks: Are linked through the provision of walking and cycle trails and rights of way; Are integrated with open space contributions from abutting subdivisions; and Incorporate, where possible, links between major parks and activity areas, along waterways and natural drainage corridors, connecting places of natural and cultural interest, as well as maintaining public accessibility on public land immediately adjoining waterways and coasts. 	This plan responds to the direction of this clause by recommending the further development of substantial cycle and pedestrian links through this area, which connect to existing pathways. In particular, it draws further links between the informal recreational activities available along the Murray River and the more formal recreational activities in the Old Aerodrome Recreation Reserve. The plan also encourages the appropriate activation of Lake Ranfurly to allow this area to be developed into a space which offers the community open space benefits. It is also recommended that the links to be provided within the area have consideration of the long term transition of the Mildura Landfill to another key area of public open space which can then also be linked to the Murray River via trails along the edge of Lake Ranfurly.
Clause 15.12 - Energy efficiency	Seeks to encourage land use and development that is consistent with the efficient use of energy and the minimisation of greenhouse gas emissions. Under this clause planning and responsible authorities are directed to promote energy efficient building and subdivision design, promote consolidation of urban development and integration of land use and transport and encourage retention of existing vegetation or revegetation as part of subdivision and development proposals.	This plan provides for consolidation of vacant land in close proximity to the Mildura CBD. As part of the development of the precinct, extensive pedestrian and cycling tracks are proposed to increase the available transport options for the area. The application of a Development Plan Overlay to the parcel of land recommended for increased residential development allows Council to ensure that the subdivision and building on the site is highly energy efficient, as would benefit the 'high end' housing envisaged for this area. Further to this the road layout shown on the plan ensures all dwellings will have good access to northern light, while the angled blocks allow for appropriate shading.

CLAUSE	OBJECTIVES	RESPONSE
Clause 16 - Housing	This clause encourages subdivisions in locations with access to physical and community infrastructure and providing a range of lot sizes, a convenient and safe road network, appropriate pedestrian and cycle paths, sufficient useable public open space and low vulnerability to fire. It also promotes residential development that is cost-effective in infrastructure provision and use, energy efficient, incorporates water-sensitive design principles and encourages public transport use. Opportunities for increased residential densities to help consolidate urban areas are also encouraged.	This plan shows only one additional area of subdivision, which is in a location with access to physical and community infrastructure.
Clause18.02 - Car parking and public transport access to development	This clause aims to ensure access is provided to developments in accordance with forecast demand taking advantage of all available modes of transport and to minimise impact on existing transport networks and the amenity of surrounding areas. Under this clause, consideration should be given to all modes of travel, including walking, cycling, public transport, taxis and private vehicles (passenger and freight) in providing for access to new developments.	The plan shows one key area of increased residential densities. Access to the area by vehicle is provided from both an activation of the northern portion of the Fourteenth Street road reserve and via a single driveway access point from Flora Avenue (in accordance with Vic Roads preference). Pedestrian and cycling access is prioritised and clear paths are provided to Eleventh Street and the associated bus services.
Clause 18.03 - Bicycle transport	The objective of this clause are to integrate planning for bicycle travel with land use and development planning and encourage cycling as an alternative mode of travel.	As mentioned above, a key element of this framework is the provision of a series of linked cycling paths.

CLAUSE	OBJECTIVES	RESPONSE
Clause 18.09 - Water supply, sewerage and drainage	This clause directs the Responsible Authorities to plan for the provision of water supply, sewerage and drainage services that efficiently and effectively meet State and community needs and protect the environment. Under this clause, urban development must be provided with sewerage at the time of subdivision, or lots created by the subdivision must be capable of adequately treating and retaining all domestic wastewater within the boundaries of each lot consistent with the Guidelines for Environmental Management - Septic Tanks Code of Practice, Publication 891 (EPA 2003) and State environment protection policy (Waters of Victoria).	This framework responds to this clause in two ways. It does so firstly by placing the emphasis on conservation west of Flora Avenue in proximity to the Murray River and setting minimum lot sizes under the schedule to the Rural Conservation Zone. Secondly, the Development Plan Overlay to be applied to the area recommended for increased residential densities will ensure that sewerage and drainage issues are taken into account. It should be noted that the indicative subdivision layout shows an additional drainage basin provided on this parcel at the low point in the land. It is recommended that the land proposed for low density development east of Flora Avenue be considered for linkage to the urban drainage system if possible.
Clause 19.01 - Subdivision	Seeks to ensure the design of subdivisions achieve attractive, liveable and sustainable neighbourhoods and to control the subdivision and consolidation of land and the removal and variation of easements and restrictions through planning schemes, within the framework of the <i>Planning and Environment Act 1987</i> and the <i>Subdivision Act 1988</i> . Under this clause the development of new residential areas and in the redevelopment of existing areas, subdivision should be designed to create liveable and sustainable communities by adhering to a range of guidelines included within Clause 19.01.	These matters will be more closely assessed at the planning permit stage. However, the indicative layout shown on the framework plan indicates a number of aspects which should be maintained. These include the provision of perimeter roads to allow development at the edge of these parcels to take advantage of views across open/ green spaces while providing passive surveillance of these areas and a layout which avoids the scenario of development 'turning its back' on these spaces, and the inclusion of a drainage basin. Further to this the proposed DPO should set out a number of key principles that any subdivision should adhere to, including water sensitive urban design and the preferred road network (including rationalised entry points).

CLAUSE	OBJECTIVES	RESPONSE
Clause 19.03 - Design and built form	 The objective of this clause is to achieve high quality urban design and architecture that: Reflects the particular characteristics, aspirations and cultural identity of the community. Enhances liveability, diversity, amenity and safety of the public realm. Promotes attractiveness of towns and cities within broader strategic contexts. This will be achieved by following a range of guidelines group into the following categories of context, public realm, safety, landmarks views and vistas, pedestrian spaces, heritage, consolidation of sites and empty sites, light and shade, energy and resource efficiency, architectural quality, and landscape architecture. 	The clause applies primarily to the assessment of building forms on their environments, however, the elements of this clause have been considered in the creation of the framework plan, particularly in relation to impacts on the public realm.

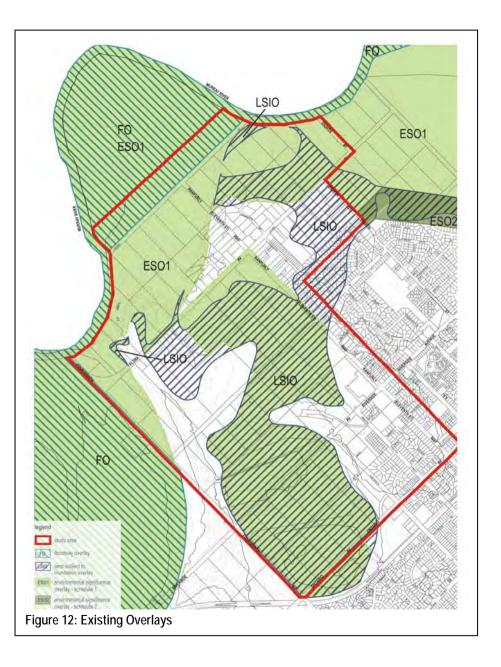
6.2 local policy

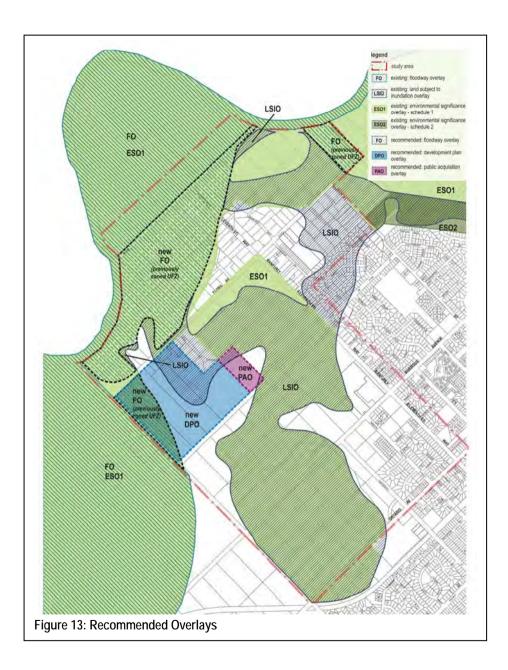
The following table outlines the local policies which have influenced the future direction of the Ontario - Flora precinct and provides an indication of the plans response to these policies.

CLAUSE	OBJECTIVES	RESPONSE
Clause 21.04-2 - Strategic Directions: Settlement	 This clause contains a number of objectives relating to the settlement of Mildura. Among the most relevant are: Objective 1- To facilitate orderly development. Reinforce the development of Mildura as the key service centre of the Region providing a wide range of community and commercial services along with residential, industrial, commercial and community development opportunities. Facilitate the urban expansion of Mildura, Mildura South and Irymple 	This land use vision and urban design framework supports Mildura as the key growth area within the municipality. In line with this objective a DPO will be required for undeveloped land within the precinct. The development of the remaining parcels of residential land within the precinct will result in a more logical and contiguous development of land in proximity to Mildura's CBD.
	 as the prime residential growth areas of the municipality and wider region. Requiring the preparation of development plans prior to subdividing 	
	 Iand for residential uses. Ensuring new develop has access to stormwater infrastructure. 	
	 Support well designed infill residential development and urban consolidation within the existing residential areas of Mildura and Irymple. 	
	 Ensure that there is at least a 10 year supply of vacant zoned residential land able to readily access required infrastructure. 	
	 Ensure that the residential growth areas of Mildura, Mildura South and Irymple are contiguous with existing residential estates and in locations that reflect logical and cost effective infrastructure servicing options. 	

CLAUSE	OBJECTIVES	RESPONSE	
	 Implementing strategic directions contained within Structure Plans. Objective 2- To provide, maintain and make efficient use of infrastructure and community facilities. Provide drainage and other relevant infrastructure on at least two or ideally three development fronts within the Mildura, Mildura South and Irymple urban areas (emphasis added). 	The plan provides an additional, though limited, area of residential development on an alternative front, in an area with easy access to existing community infrastructure and services. The DPO to be applied to the land should include the application of water sensitive urban design principles.	
	 Support proposals for residential development that can be serviced by Council's infrastructure program as indicated on the Town Structure Plans in preference to on-site infrastructure provision. 		
	 Focussing development around existing community infrastructure and services. 		
	 Encouraging the application of water sensitive design principles in subdivision and development. 	One of the key rationales of the development of elevated land within this precinct at conventional densities is the opportunity this land provides to increase the diversity of housing available in the area. This could include the provision of medium density	
	Objective 3 -To provide a diversity of housing styles and living		
	 Encouraging future residential development at a range of lots sizes and densities (including medium density development) in appropriate locations, particularly in close proximity to town activity centres. 	development along the golf course edge and development of housing which would be suitable and desirable to Mildura's expanding elderly population.	
	 Encourage a diversity of housing styles and densities reflecting changing market demands and recent trends such as the development of units and smaller housing lots. 		
	 Accommodating the demand for rural residential and low density residential development in planned estates. 	Residential land uses are considered sensitive uses. It is acknowledged that the land proposed for development is within a short distance of the Mildura Landfill.	
	 Objective 4 - Minimise the potential for future land use conflicts. Limit the location of sensitive land uses in the vicinity of industries or other activities with significant off site effects such as noise, traffic 	However, the houses are beyond the 200m specified in the Mildura Planning Scheme and are separated by extensive canopy vegetation and other approved developments	

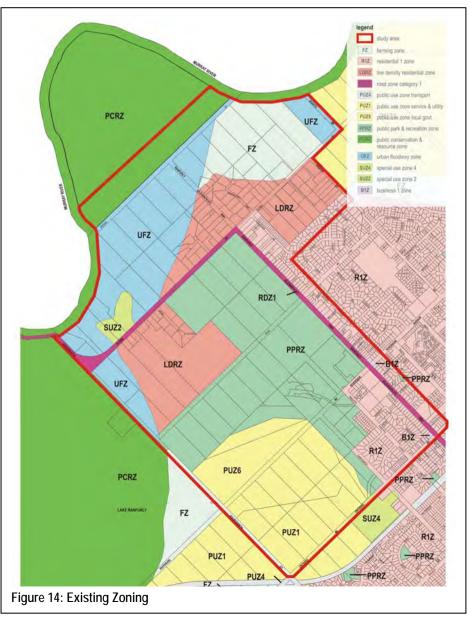
CLAUSE	OBJECTIVES	RESPONSE
	 and residual air emissions. (authors emphasis added). Strategies to implement the above policy directions include: Applying Development Plan Overlay 1 (DPO1) to undeveloped land zoned Residential 1. Applying Development Plan Overlay 2 (DPO2) to undeveloped land zoned Low Density Residential. However, the above strategy does not appear to have been implemented in relation to the undeveloped LDR land within the Study Area. This clause also contains the Mildura Structure Plan which shows the Study Area as falling partially beyond the 2030 'Residential Growth Boundary, with the relevant section shown below. 	 Given the important sensitivities of land in this area due to the proximity to important areas of open space, the application of an individual DPO which addresses the issues associated with, and desired outcomes for, this land would be preferable. The directions contained within the existing DPO1 and DPO2 could be incorporated into these new schedules where relevant. In relation to the Mildura Structure Plan, the following is noted: The plan shown in the scheme is indicative only and is meant to serve the above objectives. The growth boundary surrounds only development at conventional densities, with low density development identified beyond this boundary. There are a number of areas beyond this boundary which either contain approved residential development or proposed residential development, including the Mildura Golf Club and the potential Marina development. As such the indicative nature of this boundary is reinforced, and, provided development meets the objectives of the clause, the plan shown within this clause should not be afforded significant weight.
Clause 22.05 - Public Lands Policy	This policy applies to all land which abuts the Public Conservation and Resource Zone (PCRZ). Under this clause it is policy that urban or other intensive forms of use or development adjacent to public land be minimised where such use or development could have a detrimental impact on public land values.	There are two areas which adjoin public land within the study area. The first of these is to the north and west, comprising the Murray River environs and the second is to the west, where Lake Ranfurly is located. This plan shows both areas buffered from adjoining land uses by the application of the Rural Conservation Zone. Many of the measures proposed within this plan are intended to ensure positive outcomes for the valuable public land within and around the precinct through increased awareness and activation.

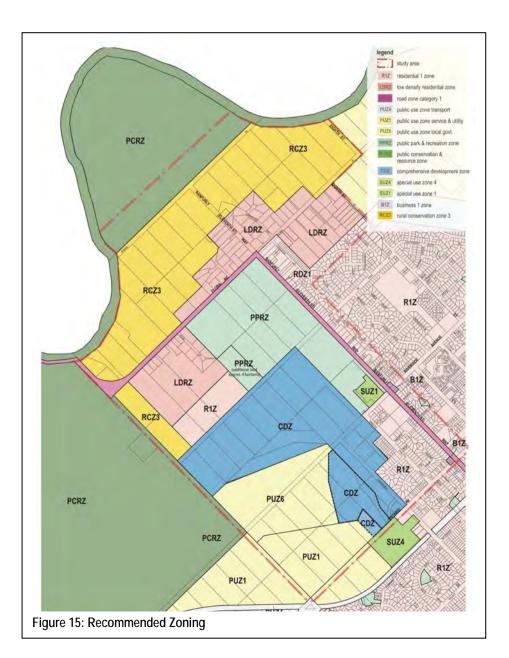




6.3 zoning

Rezoning proposed as part of this Land Use Vision has been carefully considered. An assessment of the potential zones for application and the strategic underpinning of those applied is detailed below:





Zone	Aim of the zone	Can this zone support the preferred land use vision for the precinct?	Initial recommendation
RESIDENTIAL 1 ZONE (R1Z)	 To provide for residential development at a range of densities with a variety of dwellings to meet the housing needs of all households. To encourage residential development that respects the neighbourhood character. In appropriate locations, to allow educational, recreational, religious, community and a limited range of other non-residential uses to serve local community needs. 	 This zone is considered the 'standard' residential zoning. Variations can be made to the schedule to specify different lot sizes, side setbacks etc. 	 This zone could be applied to the vacant land within the precinct which is not affected by flooding. This would then achieve a more efficient use of land in close proximity to facilities and services.
RESIDENTIAL 2 ZONE (R2Z)	 To encourage residential development at medium or higher densities to make optimum use f the facilities and services available. To encourage residential development that respects the neighbourhood character. In appropriate locations, to allow educational, recreational, religious, community and a limited range of other non- residential uses to serve local community needs. 	 This zone is generally applied to area where medium and higher density development are the preferred outcomes. This zoning could facilitate medium density development in the area, should this be preferred. 	As it is unlikely that higher density housing will be suitable for the area, this zoning is unlikely to be applied.
LOW DENSITY RESIDENTIAL ZONE (LRDZ)	• To provide for low-density residential development on lots which, in the absence of reticulated sewerage, can treat and retain all wastewater.	 Land zoned LDR has a minimum lot size of 4000sqm. These lots must also provide their own infrastructure. While the zone is often applied to facilitate more landscape orientated outcomes, this is not always the outcome achieved, particularly in drier areas where it can be difficult to establish vegetation. This zone is often utilised as a transition zone between rural and urban areas, the current LDR zoning at Mildura's edges reflects this. 	 This zoning is appropriate as applied, although there may be some reduction in the provisions if some land is rezoned R1Z. There is more than ample provision of LDR land in Mildura.

RESIDENTIAL 3 ZONE (R3Z) BUSINESS 1 ZONE	- - -	To provide for residential development at a range of densities with a variety of dwellings to meet the housing needs of all households. To encourage residential development that respects the neighbourhood character. To limit the maximum height of a dwelling or residential building. In appropriate locations, to allow educational, recreational, religious, community and a limited range of other non- residential uses to serve local community needs. To encourage the intensive development of business	•	This zoning is generally used in more sensitive residential locations, where a particular character is needed to be protected, such as heritage precincts.	•	It is unlikely that this precinct contains areas which would be characterised as such. It is considered unlikely this zone will be appropriate The zoning is appropriate for the small areas of
(B1Z)		centres for retailing and other complementary commercial, entertainment and community uses.		area was to be developed.	-	shops within the precinct. As there is no intensification of commercial uses within the precinct proposed this zone is unlikely to be applied further.
RURAL ACTIVITY ZONE (RAZ)	• • •	To provide for the use of land for agriculture. To provide for other uses and development, in appropriate locations, which are compatible with agriculture and the environmental and landscape characteristics of the area. To ensure that use and development does not adversely affect surrounding land uses. To provide for the use and development of land for the specific purposes identified in a schedule to this zone. To protect and enhance natural resources and the biodiversity of the area. To encourage use and development of land based on comprehensive and sustainable land management practices and infrastructure provision.	• • • •	 This is essentially a mixed use agricultural zone which caters for farming and other compatible uses. A wider range of tourism commercial and retail development can be considered, including nature based tourist and recreation facilities. Due to the wider range of uses that con be considered, a 'purpose' for the area should be determined to ensure decisions are in accordance with the Council's planning objectives. There is emphasis on the protection of amenity as well as the environment. RAZ is considered an appropriate zone to apply should Council wish to facilitate tourism related uses in a predominantly rural area with environmental and landscape characteristic values. This is not a quasi residential zone and the schedule to this zone should nominate an appropriate minimum lot size. 	•	It may be that this is a more appropriate zone for the interface area between the PCRZ and the residential areas where land is currently zoned FZ. It is possible that it may be appropriate to rezone part of the land zoned UFZ to RAZ with a FO applied, depending on the level and range of activities desired.

RURAL CONSERVATION ZONE (RCZ)	 To conserve the values specified in the schedule to this zone. To protect and enhance the natural environment and natural processes for their historic, archaeological and scientific interest, landscape, faunal habitat and cultural values. To protect and enhance natural resources and the biodiversity of the area. To encourage development and use of land which is consistent with sustainable land management and land capability practices, and which takes into account the conservation values and environmental sensitivity of the locality. To provide for agricultural use consistent with the conservation of environmental and landscape values of the area. To conserve and enhance the cultural significance and character of open rural and scenic non urban landscapes. 	 This zone is a conservation zone which caters for rural areas with special environmental characteristics. This the primary concern of this zone is the protection of environmental and landscape values. The schedule to this zone must identify the conservation values, which could be historic, archaeological, landscape, ecological, cultural or scientific. Land use and development is strictly controlled in this zone. In general there is an expectation that a proposal will only be permitted if it conserves the values identified for the land, the site is environmentally capable of sustaining the proposal and it is compatible with surrounding land uses. 	 Given the important conservation values of the Murray River environs and Lake Ranfurly, as demonstrated by the application of the PCRZ, this zone could form an appropriate transition from more intensive uses. MRCC has applied this zone successfully to other areas. The restrictions on use and development is appropriate given much of the area proposed for rezoning is currently zoned Urban Floodway. (note: a Floodway Overlay will also be applied to the land previously zoned UFZ). However, this zone allows a number of uses that were prohibited under current zoning, with the caveat that they must accord with the ecological functions of the land, which is desirable. This zone could be applied to land adjoining the PCRZ land of both Lake Ranfurly and the Murray River.
RURAL LIVING ZONE (RLZ)	 To provide for residential use in a rural environment. To provide for agricultural land uses which do not adversely affect the amenity of surrounding land uses. To protect and enhance the natural resources, biodiversity and landscape and heritage values of the area. To encourage use and development of land based on comprehensive and sustainable land management practices and infrastructure provision. 	 This zone caters for residential use in a rural setting. Typically farming uses carried out on RLZ lots is not intended to provide economic sustenance. Any development under this zone must meet the requirements of Minister's Direction No.6 Rural Residential Development. Land uses allowed under this zone often occur in urban areas and these uses need to be planned carefully to ensure that the zone does not become an unplanned urban area. 	 While this zone could be considered for land to the west of Flora Avenue, the application of this zone would result in a de facto low density residential zoning. Zoning RLZ could be considered contrary to Clause 22.05 of the Mildura Planning Scheme. Zoning this land RLZ would also conflict with the stated intention of drawing a more definitive line between urban and non-urban uses at Flora Avenue.

FARMING ZONE (FZ) SPECIAL USE ZONE (SUZ)	 To provide for the use of land for agriculture. To encourage the retention of productive agricultural land. To ensure that non-agricultural uses, particularly dwellings, do not adversely affect the use of land for agriculture. To encourage use and development of land based on comprehensive and sustainable land management practices and infrastructure provision. To protect and enhance natural resources and the biodiversity of the area. To recognise or provide for the use and development of land based on the development of land based on the development of the area. 	 This zone is intended to support agricultural uses above all other land uses, and to support the establishment and expansion of agricultural activities with minimal constraints. This zone should be used in areas where farming is the dominant land use and is expected to continue as such into the future. Land uses not directly associated with farming are strongly discouraged. The farming zone is intended to encourage diverse farming practises, some of which can have significant off-site impacts. The use of the Special Use Zone is not encouraged where 	 This zone is not suitable in such close proximity to the residential core of Mildura The fragmented nature of the land parcels in the area mean future expansion of the farming land is unlikely. In relation to masterplanning for sites, the Special
(502)	land for specific purposes as identified in a schedule in this zone.	 other alternatives area available The application of the SUZ should only occur when other combinations of zones and overlay cannot produce an appropriate outcome, or the future strategic use of the land is not known 	 Use Zone is discouraged, in favour of a DPO or IPO or other planning control. It is recommended that the application of the SUZ be carefully considered Although a SUZ has been proposed in relation to the golf club development, it is not appear that this would be an appropriate use of the VPPs A SUZ may be appropriate to the land owned by St Josephs School, given the planning context (other St Josephs land within Mildura is covered by SUZ1).
COMPREHENSIVE DEVELOPMENT ZONE (CDZ)	To provide for a range of uses and the development of land in accordance with a comprehensive development plan incorporated in this scheme.	 This a zone which has been designed to facilitate a particular use and development in accordance with a particular plan. 	 Given the existing plan for the development of the golf course and the range of uses proposed for this parcel at CDZ may be appropriate. This zone may also be appropriate to guide the desired development on land which is currently zoned for public use but which is anticipated to accommodate some form of community uses which may include business and/ or retail components. This zoning would allow Council significant control over future development of these parcels.

Public Use Zone (PUZ)	 To recognise public land use for public utility and community services and facilities. To provide for associated uses that are consistent with the intent of the public land reservation or purpose. 	 This zone should only be applied to land owner by a government body or public authority. The application of this zone should only occurs when the zoning of the surrounding land is inappropriate or where a special reason (usually to do with management) exists for defining the land separately. This zone is not to be used for land which is utilised for any privatised or semi-privatised function, even if this function is broadly public in its nature. 	 The PUZ appears to be appropriate zoning for the drainage basin and landfill. Depending on the future development of the recycling facility, this portion of the land may need to be rezoned.
PUBLIC PARK AND RECREATION ZONE (PPRZ)	 To recognise areas for public recreation and open space. To protect and conserve areas of significance where appropriate. To provide for commercial uses where appropriate. 	 This zone is used to support areas for recreation, both formal and informal, and associated uses. Commercial uses are allowed if they are associated with the land use. 	 This zone is appropriate for the recreational reserve. The zoning of the golf course as PPRZ is an inappropriate use of this zone as it is in private ownership which will soon include residential land uses.
PUBLIC CONSERVATION AND RESOURCE ZONE (PCRZ)	 To protect and conserve the natural environment and natural processes for their historic, scientific, landscape, habitat or cultural values. To provide facilities which assist in public education and interpretation of the natural environment with minimal degradation of the natural environment or natural processes. To provide for appropriate resource based uses. 	 This zone is generally used to for publicly owned land which is intended to serve a more natural function, rather than more formalised recreation opportunities. This zone is often used in coastal and riverine areas. 	This zone is appears to be appropriate for the areas it has been applied.
URBAN FLOODWAY ZONE (UFZ)	 To identify waterways, major floodpaths, drainage depressions and high hazard areas within urban areas which have the greatest risk and frequency of being affected by flooding. To ensure that any development maintains the free passage and temporary storage of floodwater, minimises flood damage and is compatible with flood hazard, local drainage conditions and the minimisation of soil erosion, sedimentation and silting. 	 Applying an urban Floodway zone means that very little built development can occur. A permit is required for most uses under the UFZ, including for agriculture. This zone should be applied where the primary function of the land is to convey active flood flows. 	 Depending on the severity of the flooding risk, it may be that the application of a Flooding Overlay rather than the application of the UFZ may be appropriate. The application of a FO rather than an UFZ may result in some activation of appropriate uses in the land currently zoned UFZ.

	•	To reflect any declarations under Division 4 of Part 10 of the Water Act, 1989. To protect water quality and waterways as natural resources in accordance with the provisions of relevant State Environment Protection Policies, and particularly in accordance with Clauses 33 and 35 of the State Environment Protection Policy (Waters of Victoria).	-	The flood zone is not widely used due to its restrictive nature and often the application of another zone (such as FZ or PPRZ) with a Flooding Overlay applied results in more efficient use of the land as the focus is on controlling development rather than use. The UFZ should only be applied in urban areas, not rural. The land currently zoned UFZ in the study area falls primarily outside the urban area.		
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6.4 amendment c28

Amendment C28 was the subject of a Planning Panel report in February 2005 by Members McKenzie and Gibson. The amendment sought to implement the recommendations of the 'Three Year Review' of the Mildura Planning Scheme. It was a major planning amendment which set out the parameters for future growth within the municipality and translated strategic policies underpinned by detailed background reviews into statutory responsibilities. The amendment involved extensive changes to local policy, the zoning of land and the application of overlays. The panel report recommended that the local policies, zoning and overlays exhibited as part of Amendment C28 be adopted, as they have been since.

In relation to the areas covered by this land use and urban design framework plan the following is of relevance:

- Many of the submissions relating to the rezoning of residential land related to the lack of choice provided by the development areas chosen by Council which were distorting the market. The Panel did not find any evidence of this.
- One of the major constraints to the development of Residential 1 zoned land within Mildura is the availability of infrastructure, particularly drainage infrastructure.
- The Panel considered there were sufficient areas within Mildura that were not affected by a LSIO that development at conventional densities should not be encouraged within land affected by an LSIO.
- In relation to the land east of Flora Avenue, the Panel recommended that the LDRZ be retained but that the possibility of altering the schedules to this zone be raised with DPCD. A figure of 2000sqm – 3000sqm was suggested.
- Panel found that subdivisions of less than 0.4h could be supported.
- Further development of low density residential estates in and around Flora Avenue was supported.
- An extension to the ESO1, which relates to the Murray River Corridor, was put in place to cover a larger amount of land. The matching of ESO1 with the extent of the LSIO was considered both 'laudable' and 'logical' by the Panel.

- Panel also recommended the removal of ESO1 where it applied to any land zoned Residential, Business or Industrial.
- With a few minor exceptions, the panel was very supportive of the proposed amendment which it considered would assist in the orderly planning and development of the municipality. The amendment was adopted in its final form, incorporating changes recommended by the planning panel, by Council in March 2005.

It is noted that many of the issues raised in relation to the rezoning of land to Residential 1 Zone within the Ontario–Flora Precinct were raised previously when the new zoning regimes were introduced and again during the Panel Hearing for Amendment C8. At that time the proposed rezoning was not supported by the Panel. This related primarily to the lack of strategic justification provided to the Panel.

In response to these comments the following is noted:

- While it is not claimed that the lack of choice provided within south Mildura is "distorting the market", the parcel of land currently proposed for rezoning in the land use vision, offers significant differences to the land available for development in the south. This is primarily a result of the closer proximity to established facilities and services and partly because of the style of dwelling possible and desirable in the area in response to the proximate environmental assets.
- The parcel of land proposed for rezoning to conventional densities represents the portion of the undeveloped land which is not affected by an LSIO. Land affected by an LSIO is recommended to stay as LDRZ.
- This issue of altering the schedules to the LDRZ was raised with DPCD subsequent to the Panel Report. DPCD indicated they were not willing to explore this option.
- While it is noted that smaller lots were possible, recent indications from the CMA are that the land in the northern area affected by the LSIO may be more severely affected by flooding than was previously felt. As such, this LDRZ land has been kept at a minimum lot size of 0.4h.
- This land use vision has responded to the issues raised within this Panel Report and has sought to provide a solution which allows the orderly development of valuable urban land while responding to the inherent constraints of some of the land within the precinct.

6.5 amendment c8

Amendment C8 was the subject of a Planning Panel report in 2002 by Members Lee and Scale. The amendment sought to rezone the Low Density Residential land between the Mildura Golf Course and Flora Avenue to a Residential 1 Zone, with a Development Plan Overlay applied to control the form of development and associated changes to the Mildura Planning Scheme. The Panel strongly rejected the proposed amendment due to the lack of supporting strategic documentation, and the contradiction of existing local policy. Of note is the following:

- Panel in particular highlighted the lack of strategic justification provided in relation to the residential land supply in Mildura and felt that the justification for this land being rezoned/ developed before other land in the Mildura area was not adequately addressed.
- "The panel accepts that, subject to determining the final layout, density and servicing of the land, the subject land and area has the potential for residential land use [at conventional densities]. The area appears to be an area that has market potential for quality residential development near a range of natural features and services."
- The use of a Development Plan Overlay to guide development was strongly supported by the Panel.
- Panel supported the minimum lot size of 2000sqm for the area affected by flooding as proposed by the Mallee Catchment Management Authority.

Panel considered that servicing issues could be dealt with at the development stage, but accepted that, in principle, all services could be provided to this land. Although it is noted they would have preferred more information relating to the drainage management of the area.

In relation to the strategic justification for the rezoning of the land, the following is noted:

- Opportunities for increasing diversity of housing within Mildura;
- Area enjoys close proximity to existing and established services and environmental assets;
- Development of this parcel in line with approved timeframes for adjoining parcels offers benefits in co-ordination and orderly planning; and
- This report recommends a smaller parcel of land for rezoning.

These matters are addressed in more detail within Section 7.2.

This report continues the recommendation raised within this Panel report that a DPO be used to guide the development of additional residential areas. It is noted that, while the CMA previously supported lots of 2000sqm, recent analysis appears to show that a portion of this land is more severely affected by flooding than previously thought. As such, and in response to DPCD's indication that amendments to the schedule of the LDRZ will not be supported, lot sizes within the area to stay as LDRZ remain at the standard size of 0.4h.

Servicing issues will still be dealt with a permit stage but it is noted that UDF shows the provision of a drainage basin within the LDR subdivision area in line with the recommendation of drainage authorities that, if the land is to accommodate conventional residential densities, a minimum area of 8000sqm should be set aside for stormwater management.

7 land supply and demand

Under the Mildura Planning Scheme, Council is required to have 10 years supply of residential land available for development. Good planning practise also seeks to avoid an excess of residentially zoned land to ensure the orderly development of land. There has been a long history of rezoning requests within the Ontario-Flora precinct, some of which have been assessed by the previous Panel hearings detailed above. This is particularly the case for the vacant parcel of land in the north-west of the study area. Requests have been received as part of this process to rezone all of that land to conventional residential densities. A request has also been submitted to Council to rezone land currently Farming Zone, north of Flora Avenue, to a Low Density Residential or Rural Living Zone.

In relation to these requests, the plan proposes to rezone only a portion of this land to conventional residential densities, where the land is not affected by the flooding constraints which apply to other areas of the land.

If the rezoning of land to either LDRZ or R1Z is to be supported, strategic justification will be required to ensure that any rezoning accords with the existing Mildura Planning Scheme.

Pressure for residential development in Mildura can be generally characterised by the following two categories:

- Low Density Residential (as defined by the Low Density Residential Zone); and
- Standard Residential density (as defined by the Residential 1 Zone).

7.1 low density residential

Minister's Direction 6 sets the context for supply of land to accommodate Low Density Residential development in rural areas limiting the pool of Low Density Residential zoned land in any municipality to 10 year's supply.

'An amendment must not provide for rural residential use or development of land which would increase the supply of rural residential land to more than that required to meet a 10 year demand for rural residential lots (including vacant lots in the existing supply), based on annual building approvals over at least the past five years or other suitable basis'. The *Rural Residential Review* undertaken by OPA Pty Ltd (2003) estimated that the existing supply of rural residential land in the municipality would be exhausted within approximately 5 years. Having regard to this, the Review forecast an ambitious land supply scenario of 50 dwellings per year, requiring a total of 500 lots to become available over the next 10 years.

In order to meet this 10 year forecast demand the Review recommended that Council seek to rezone in the short term approximately 82ha of land to the Low Density Residential Zone. This was supported by the Panel for Amendment C28. The *Rural Residential Review* (2003) also identified that nearly 100% of low density residential opportunities being created each year were being taken up, but that largely this was a function of decreasing opportunities for rural residential development due to:

- limited availability of land parcels on the market;
- delay in bringing on-line subdivisions on existing zoned Low Density Residential land due to drainage issues; and
- strict interpretation of the existing Rural Policy.

Anecdotal evidence from Council suggests a slowing in demand for LDZ lots in recent years, with fewer lots being taken up per year. It is recommended that an update of the existing residential land supply review should be undertaken. Given rezoning that has occurred in other areas of Mildura subsequent to the previous *Rural Residential Review*, there is not considered to be justification for additional LDZ land within this study area. This is supported by the presence of undeveloped LDZ lots within this Study Area.

While we appreciate and agree that the Farming Zone is no longer appropriate to the west of Flora Avenue due to the limited size and isolated nature of this pocket of farming land, this report recommends the application of a Rural Conservation Zone rather than the requested Rural Living Zone or LDRZ. The rationale behind this recommendation is discussed below.

The Rural Living Zone has not been previously applied under the Mildura Planning Scheme and its introduction would need to be carefully considered. Further to this, the relevant planning practise note draws attention to the fact that this zone should not be utilised as a de-facto LDRZ, which would be the case should it be applied to this land. As such, it is not appropriate for this land

The application of the Rural Conservation Zone has been chosen for the following reasons:

- The close proximity of this land to the Murray River means that any development on the land must respond to the ecological functions and landscape character. In particular the characteristics of much of this land as a floodplain need to be recognised.
- Given the undeveloped nature of much of this land which has been degraded, there is a need to focus on the remediation of this land rather than an intensification of the development.
- It was felt that the introduction of a RCZ would also reinforce the urban/ non-urban transition beyond Flora Avenue.
- In addition to this, the lack of certainty regarding flooding constraints (and the need to wait for revised flood data) means that a zone which supports an intensification of residential uses would be inappropriate for this area.

It is deemed that the Low Density Residential land use style represents a typology of urban development that is consistent with the notion of a transition in the scale and form of uses between the conventional urban area of Mildura and the riverine environment that assists in articulating a change in place and identity along this corridor. This framework acknowledges the importance of LDR land in facilitating this transition in the intensity of use which often occurs at the periphery of urban centres. Beyond LDR land, the zoning of the land requires a lesser intensity of use and development to support the preferred vision and framework documented within part a. As such, it would be ideal if land immediately adjacent to Flora Avenue to the east was zoned for LDR, allowing the land on the western side to be zoned to a 'non-urban' zone.

However, this study is constrained by the extent of existing development within the study area. The framework must respond to this existing development while promoting a future form which represents a more considered and coherent vision. As such, low density development is preserved on land to the immediate east of Flora Avenue, with the exception of land adjoining Eleventh Street which has already been developed at conventional and/ or medium densities. To the west of Flora Avenue those existing low density residential lots which have already been developed are retained, but further rezoning to LDR is discouraged.

While, the existing area of LDRZ land west of Flora Avenue has been retained, there has been some refinement of the LDRZ edge. It is acknowledged that the LDRZ boundary currently reflects the extent of the different flood related overlays. Given the review of these overlays, which is on-

going, it is recommended that the edges of the LDRZ be matched to the property boundaries, noting the land will continue to be affected by flood related overlays. This is part of a wider aim to create a more legible arrangement of zoning within this precinct. While overlays which relate to constraints on development should match the extent of the conditions which cause that constraint (ie flooding or heritage), it is considered that the underlying zoning should be arranged more legibly. This will result in any development on specific areas within each lot which are affected by flooding needing to respond to the constraints and should encourage more thoughtful siting of proposed developments.

With the existing undeveloped land east of Flora Avenue, it is noted that, while there was previous approval for 33 LDRZ lots (on landed owner by Barker), only 9 LDR lots are now proposed on the Barker land (noting that an additional 25 LDR are recommended for the adjoining land). Given the slowing of the take-up of LDRZ lots and the rezonings that were proposed within Amendment C28, this will not affect the supply of LDRZ lots within Mildura.

As such, there is to be no additional zoning of land to LDRZ as part of this land use vision and urban design framework.

7.2 residential 1 zone

The Mildura Planning Scheme iterates that within the wider local government area addressed by the planning scheme, future residential growth is to be focussed in Mildura, Mildura South and Irymple. The '*Review of the Mildura and Irymple Residential Land Strategies'* established a 2030 residential strategy for Mildura City, Mildura South and Irymple. The strategy incorporated a residential growth boundary that contains only land zoned (or proposed for zoning to) Residential 1. Within the precinct, the boundary is convoluted with the only area within the growth boundary being a portion of the Ularara Estate. However, as clearly stated, the structure plan contained at Clause 21.04 of the Mildura Planning Scheme is intended to be indicative only.

The residential strategy was supported by the Panel through the Amendment C28 process however it was recommended that the associated residential staging map be removed in favour of letting the market place to operate freely in terms of timing of subdivision and servicing.

As identified, current supply of R1Z land meets Council's obligation under Clause 14.01-2. The majority of land identified for short to medium term residential development is currently unserviced, hence putting pressure on the ability of this land to meet the demand for residential development in the City of Mildura which has been fuelled by recent significant population growth.

However, projected rates of growth for the Mildura Rural City appear to be slowing, as indicated by the figures below:

- 2006: 51,824
- 2007: 52,095
- 2008: 52,445
- 2009: 52,781
- 2010: 53,104
- 2011: 53,351
- 2012: 53,528

Please note that these *Victoria in Future 2008 - first release population projections* are not predictions of the future, nor are they targets. They analyse changing economic and social structures and other drivers of demographic trends to indicate possible future populations if the present identified demographic and social trends continue. The statistics contained within the *Victoria in Future 2008* indicates that Mildura's residential population is anticipated to increase from 51,824 in 2006 to 55,523 in 2026.

Population projections for Mildura in 2031 contained within various studies completed by MRCC and State Government under a range of growth scenarios ranges from a low of approximately 56,500 (Victoria In Future 2008) to a high of 73,075 (MRCC commissioned report – high projection 2003). Regardless of the specific numerical increase, Mildura remains one of the fastest growing regional centres in Victoria.

While the issue of the orderly release of land in line with previously approved development timeframes is obviously a key concern from a strategic planning perspective, there are a number of additional factors in relation to the land proposed for Residential 1 Zoning which have an influence on the appropriateness of the rezoning required to implement the Ontario-Flora Land Use Vision and Urban Design Framework. These are discussed in more detail below.

Finally, it is important to acknowledge that, while Mildura enjoys a higher than average growth among younger population, the most notable increase in age sector, as with most of Australia, will be among older portions of the population. Mildura is expected to experience a significant increase in its older population, particularly as elderly residents currently living outside the City of Mildura move closer to services and facilities (such as hospitals) as they age.



Figure 16: existing development at golf club edges

diversity and difference in style offers

One of the most important factors in the process developing a recommendation to rezone a portion of the existing undeveloped land within this precinct to conventional densities relates to the clear difference between this land, and the type of development possible on this land, and current residential growth areas.

- The Mildura Planning Scheme contains a number of policy directions which relate to dwelling diversity, including:
- Encourage future residential development at a range of lots sizes and densities (including medium density development) in appropriate locations, particularly in close proximity to town activity centres. (Clause 21.04);

- Encourage a diversity of housing styles and densities reflecting changing market demands and recent trends such as the development of units and smaller housing lots. (Clause 21.04); and
- Residents will be living in a variety of housing styles and environments by 2030. They will
 range from attractive and consolidated medium density clusters in the major townships
 (sic)...(Clause 21.03).

In recent years there has been a proportional increase in both the number of persons that are 60+ years and those that are less than 4 years of age. This trend (which reflects national demographic changes) is projected to continue with resultant impacts on a range of community based services and facilities.

As mentioned in the above section, the portion of the population expected to experience the highest levels of growth are the elderly. The pocket of land proposed for rezoning under this land use vision has a unique opportunity to meet what will be a growing demand for housing suitable for older people in a high amenity location which has excellent access both to recreational activities, including the Golf Club, but also to the Mildura Base Hospital.

In 2001, three quarters of all dwellings in Mildura were separate houses. The desirable 'park edge' location of the land proposed offers a unique opportunity to incorporate dwelling styles which may differ from the standard housing style seen in the new estates in Mildura South, examples of which can be seen at figure 17.

Existing development towards the eastern edge of the Mildura Golf Course offers some indication of the increased densities that can be accommodated while maintaining very high levels of amenity for residents. See figure 16 for examples. Particularly within the most eastern cell proposed for rezoning to R1Z, there could be opportunities for medium density or townhouse development, within a landscape setting.

proximity to existing and established services (esp. hospital and environmental assets)

Good planning practise seeks to focus development around existing community infrastructure and services, as expressed by the Mildura Planning Scheme (Clause 21.04). While within the designated growth areas community infrastructure and services are being developed by Council, nonetheless, there are significant opportunities for development within this area due to its locational advantages. Unlike the designated growth areas, this precinct has access to an extensive range of *existing* community infrastructure and services, with the expectation of further

growth in these areas. The precinct is substantially closer to the Mildura CBD than the Mildura South growth area, with direct vehicular, public transport and pedestrian links. This can be clearly seen at figure 18. Furthermore this precinct enjoys close proximity to facilities such as the hospital, which is unlikely to ever be matched by the designated growth areas.



Figure 17: housing development in mildura south

In addition, the recreational and, more particularly, environmental advantages this precinct enjoys due to the proximity to large areas of open space and the river environment also offers substantial benefits to any future residents of this area that, again, are unlikely to be matched by development within the growth areas.

The development of infrastructure to support the growth areas will continue, and is supported, as these growth areas will continue to accommodate the majority of Mildura's residential growth. However, it is considered that the utilisation of the non-floodprone land which is in such close proximity to existing and established services and environmental assets represents an appropriate outcome under good planning practise.

legibility of urban form

Within Clause 21.03 of the Mildura Planning Scheme the Responsible Authority states that the municipality's townships will be clearly defined by 2030. Currently there is a bleeding of the edge of what is the Rural City of Mildura within this area. While some pockets have been developed with conventional residential densities, other areas in close proximity are undeveloped, utilised for agriculture or grazing. This is reinforced by the public land zoning of much of the area beyond the precinct boundaries. This subsequently leads to a lack of clarity as to where the 'city' ends within this area. Given the clear 'gateway' role that the intersection of Flora Avenue and the Fourteenth Street road reserve plays, land east of Flora can be read as forming part of the 'city' even if open spaces form the primary land uses in this area. These open spaces are, however, of a formal nature, rather than natural spaces.

The establishment of Flora Avenue as the boundary to the 'urban' area of Mildura, with land beyond this identified as 'non-urban', assists in increasing the legibility both in relation to planning matters, but also as the city is 'read' by those travelling through this precinct and entering Mildura through it's western gateway.

development in line with approved timeframes

One of the elements that has been deliberated in the development of this land use vision is the importance of ensuring that the 'ad-hoc' nature of development within the precinct does not continue into the future. The approved development at the Golf Club has a timeframe of approximately 10 years for completion. It would be beneficial if any additional residential development within the area was undertaken within a similar timeframe. This will allow co-ordination and co-operation between adjoining landowners and avoid problems with the development of infrastructure that may occur once residential densities within the area are increased.

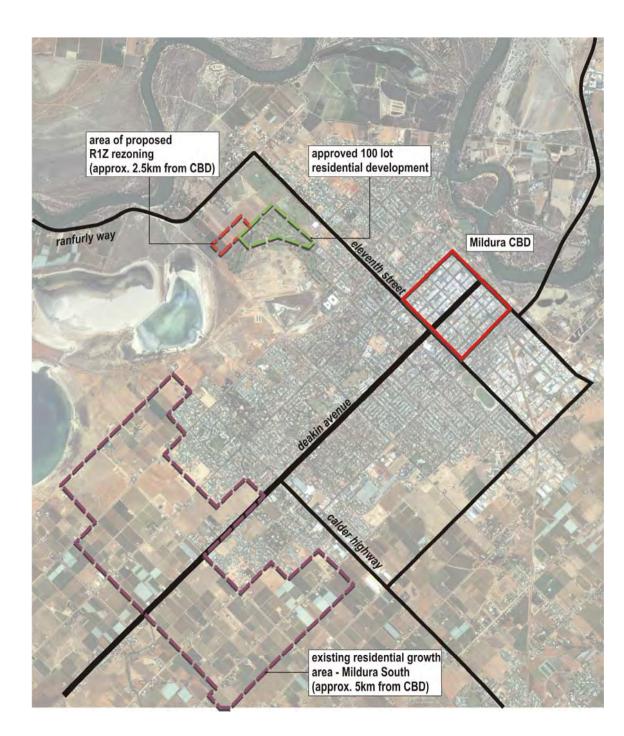
small pockets will not have major influence on long term strategic land supply.

The other factor which has influenced the decision to recommend a portion of land for redevelopment is the size of the proposed parcel for rezoning. This land, adjacent to an approved residential development beyond the residential growth boundary, covers an area of approximately 7.5 hectares. This does not amount to a large area, particularly given amount of land recommended for rezoning under Amendment C28. The size of this portion of land comparative to the growth area in Mildura South can also be seen at figure 18. The amount of additional lots proposed is shown at 100 but the land could possibly accommodate more lots, as smaller lots

sizes could be included within the proposed DPO to allow for medium density development immediately adjacent to the open spaces.

While the concern raised within the Panel report for Amendment C28 that rezoning this land could set a precedent for 'spot rezonings', we believe that this parcel of land has a number of characteristics that distinguish the land from other areas where spot rezonings may be requested. There are very few undeveloped areas within such proximity to the CBD (with the exception of Etiwanda Avenue which was recommended for rezoning). Beyond this there are no other areas within Mildura that will be able to offer such a high level of amenity given the amount of 'green' spaces in the precinct.

No single feature establishes the strategic justification for this project, rather the combined effect of each of the factors suggests that the recommended rezoning is in keeping with the overarching principles of Clause 11 of the Mildura Planning Scheme. The opportunities offered by the rezoning of this land are considered to be significant, offering the potential for high quality development in a strategically justified location. Figure 18 Rezoning Context



8 image and presentation

Flora Avenue represents both the western gateway to the City of Mildura and also acts, in many ways, as the boundary between the urban development to the south and the non-urban development to the north. The presentation and amenity of this key gateway varies along its length as a function of land use, design and development issues.

8.1 current appearance

The following points highlight the key aspects of the presentation and image of the western gateway:

8.1.1 land use

As one approaches Mildura from the west, farmland and the river corridor dominate. At the intersection of Flora Avenue and the Fourteenth Street road reserve, the area consisting the road reserve and the Lake Ranfurly environs are currently undeveloped, with a few tin sheds and sparse canopy vegetation. On the east side the land along Flora Avenue contains a number of low density residences, which primarily address Flora Avenue. Beyond these residences is the Old Aerodrome Recreation Reserve. To the west, the land is developed with a caravan park before an area of unused land (previously the site of a zoo). Beyond this, opposite the recreation reserve is additional low density residential development.

8.1.2 character and landscape

The character of this area is mixed. Areas to the north east have a more conventional suburban feel, with low density dwellings mostly positioned to the street frontage and the formal sporting facilities. However, land around 'the gateway' (the intersection of Fourteenth Street and Flora Avenue), is primarily undeveloped and, in many ways, appears derelict. While the west side of Flora displays a pocket of canopy vegetation which reflects the 'natural' environment, canopy vegetation reduces along Flora Avenue and the old zoo land does not contribute positively to the character of the area.

Land to the south is dominated by Lake Ranfurly and the road reserve. Ecological functions mean this land has been largely undeveloped. These areas contain little vegetation above the ground level and are clearly used by drivers to do u-turns or 'burnouts'. There is little canopy vegetation east of the road.



Presentation at Mildura's western gateway

The character of the 'gateway' area is therefore mixed. The transition from more 'natural' character at the gateway to more suburban as Eleventh Street is approached, is appropriate. However, particularly around the Fourteenth Street road reserve, major improvements to the character could be achieved. This would be in keeping with Council planning policy which seeks to *"improve gateways to Mildura for tourist traffic"*. These improvements to *"the appearance of major transport routes into and within the towns"* are envisaged by the planning scheme as being achieved *"through street side landscaping, preferably using native species, with an emphasis on local or indigenous species."*

8.2 opportunities and findings

There are clear opportunities for improvements to this precinct. As the area is already dominated by vegetation and natural open space, this plan has focussed on a few key areas where public ream improvements will make a large contribution to the appearance of the precinct.

One of the first areas that we examined was the land to the east of Flora Avenue where very little activity currently takes place. While this could be deemed a positive outcome in some contexts, however, here the land is not being used in a manner which enhances the image of the precinct. It was considered that some activation of this land may result in an improved appearance, given the current association between the areas where no activity is occurring and the degraded land. While the flood constraints require strict controls on the development of the land, investigating potential changes to the zoning of the land may open up opportunities to achieve more active uses of the land.

Most importantly, the inclusion of a roundabout at the intersection of Flora Avenue and Fourteenth Street offers a clear opportunity to denote the gateway and announce entry (and departure) into Mildura. The roundabout is envisaged as accommodating both signage and a landscape element to clearly denote this gateway.

The landscaping begun at this roundabout intersection could then be continued along Flora Avenue, which contains medians capable of accommodating substantial native canopy plantings. These could be planted in 'clumps' rather than as a formal avenue to reflect more clearly the 'natural' context of this gateway. In combination with policy encouraging the planting of vegetation within setbacks of any dwellings along Flora Avenue, this should build on the existing character.

The other element that could improve the appearance of this gateway is the development of a wetland at Lake Ranfurly, similar to the improvements that have been made to the old Rifle Butts Swamp (now Bob Corbould Wetlands). Development of a wetland, or similar ecological system, will offer benefits in relation to connectivity between Lake Ranfurly and the precinct, opportunities for tourism and education and ecological processing of water from any new estate, which can then have follow on benefits for the heath of the lake. The development of such a wetland has been recommended in previous, Council adopted strategies. In particular, improvements to the northern corner of Lake Ranfurly will have a significant impact on the appearance of this gateway area.

9 access and mobility

9.1 pedestrians/ cycling

Council's Open Space Strategy Plan 2003 state that open space networks will, where possible, link parks and activity areas along waterways and natural drainage corridors, connect places of natural and cultural interest and maintain public access to public land immediately adjoining waterways, Open space will be linked through the provision of single or multi-purpose trails and rights of way.

One of the key issues which emerged from this project was pedestrian safety on Eleventh Street. Concern was expressed by a number of parties that the current scenario was "an accident waiting to happen". As such this study has investigated numerous ways in which pedestrian movement in the area could be configured and managed in order to improve the current situation.

The draft framework plan demonstrates a future scenario which includes intersection works at both the intersection of Fourteenth Street and Flora Avenue, and also at the intersection of Riverside Avenue and Eleventh Street. In addition, a pedestrian crossing is shown across Eleventh Street just north of Dyer Avenue. These additional intersection works are intended to both slow the speeds of traffic entering Mildura's urban area, but also to provided dedicated crossing points to allow pedestrians to access the Old Aerodrome Recreation Reserve, and any new residential estates. The intersection at Riverside Avenue will provide safe crossing opportunities for St Joseph's students utilising the shops across from the stadium site.

Ideally these works would correspond with a reduction in the speed limit in the northern portion of Eleventh Street to 60kph, rather than the 70kph that is currently in place.

Another key aim of the project was to generate increased connections between the green spaces, both within the Study Area and beyond. Council's Open Space Strategy Plan 2003 includes a direction to create a path around the Bob Corbould Wetland, with the eventual aim of creating a path through the Mildura Landfill (when converted to public space), the Golf Course and Lake Ranfurly to the Tree Chains Reserve on Ranfurly Way.

We have built on this, existing track and other proposed tracks to show an integrated pedestrian and cycling network which allow people to move easily between residential areas and both formal and informal recreation areas.

However, it is noted that the specific locations of these tracks are indicative only and further masterplanning work should be done, particularly in relation to the opening up of Lake Ranfurly. Particular details of the pathways and the most appropriate locations could be developed further as part of the 'Trails and Pathways Strategy' recommended as a 'priority action' in the *Mildura Recreation Strategy*.

In relation to the access roads, where pedestrian and cycling paths area also shown, clear separation from the access roads is suggested, as can be seen in Figure 11. Furthermore it is acknowledged that the Old Aerodrome masterplan shows a perimeter track which is envisaged to connect with additional tracks shown in this plan, offering more options for casual recreation, as well as increasing access. Pedestrian links into and through the Golf Club are also supported by the owners and should be investigated further to increase pedestrian access, particularly through to the south.

9.2 vehicles

9.2.1 fourteenth street extension

At the beginning of the process the activation of this road reserve was felt to be a logical part of the process of providing appropriate access within the study area, and also, for example, providing more efficient access to the Mildura Base Hospital from settlements to the west. However, through the consultation process a number of issues were raised in relation to the activation of this road reserve, by a variety of stakeholders. The main issues with the activation of this reserve are as follows:

- Infrastructure costs/ funding sources
- Environmental constraints
- Cultural heritage constraints
- Flooding issues
- Intersection treatments

It was concluded that the activation of this road reserve as a primary traffic corridor faced a number of potential difficulties, which needed more comprehensive investigation. When combined, the above issues meant the full activation of this reserve could not be shown as part of

this plan. What was recommended was the activation of the northern portion of this road. There were a number of reasons the activation of this portion is judged to be justified, as follows:

- The partial activation and lack of through access means the road will be used primarily by local residents and by those accessing Lake Ranfurly. These lower traffic volumes (than for a through road) therefore require less heavy infrastructure investment than if the road needed to accommodate trucks etc.
- This section will provide access to new residential development. Therefore is anticipated that some contribution could be gathered by Council from those developing the land to assist in funding.
- Activation of this section will increase access to and use of Lake Ranfurly, and will also provide opportunities to increase awareness.
- There is less impact on the aboriginal cultural heritage, which appears to be concentrated around the Bob Courbold Wetland.
- The required junction to the north (which is envisaged as a roundabout) is much easier/ less expensive than any intersection to the south which would require major realignment of both the lower section of Fourteenth Street, which currently doglegs, and of the railway line.

As such, the preferred framework plan included the construction of this part of the Fourteenth Street road reserve, as the benefits of this outweigh the costs and it was deemed to represent orderly planning which would improve the functionality and ease of access within the precinct.

When the options paper prepared as part of this study was presented to the community at a session held in October 2009, there was a very strong community response to the issue of the activation of Fourteenth Street. The strength of community support for the full construction of Fourteenth Street is linked to concerns regarding the issue of perceived traffic congestion on Eleventh Street. On the basis of this strong community support and the initial rationale for activating Mildura's traditional grid network within the precinct, the framework plan was modified to recommend that Council undertake the required investigations to determine the feasibility of this link, taking into account all the above factors.

9.2.2 eleventh street traffic congestion

As mentioned above one of the key concerns of residents is the amount and type of traffic which utilises Eleventh Street. However, it is noted that this is primarily the result of the intentional

designation of Eleventh Street as the key entry point for traffic to Mildura (as indicated by its designated Category 1 Road status). The key issues for the community were identified as:

- The level of heavy traffic (trucks) which utilise the street;
- The perceived increase in traffic volumes as a result of the development of the Ularara Estate, primarily coming from the intersection of Dyer Avenue and Eleventh Street; and
- The congestion which results from the activities which occur within the Old Aerodrome Recreation Reserve.

Given the designation of the road as a Category 1 Road, it is unlikely that there will be some change in the use of the road by truck traffic, particularly in light of the above comments in relation to the activation of Fourteenth Street. Any change in the designation of key heavy transport routes would need to be undertaken as part of a wider review of traffic movement throughout the City of Mildura and would require the approval of VicRoads. Comments from VicRoads indicate this is unlikely to occur in the short term and would require robust strategic justification.

In relation to the perceived increase in traffic volumes it is noted that this perception is not borne out in recent traffic counts conducted by MRCC. These indicate that the most recent counts on the portion of Eleventh Street below the intersection with Dyer Avenue are 6678 vehicle movements per day. Previously these counts were recorded as 7190 vehicle movements per day (in 2001).

It may be that the traffic associated with the recent upgrading and development of the Old Aerodrome Recreation Reserve has contributed to this perception. Currently, the only access to the recreation reserve below Dyer Avenue is via a single accessway which leads past the 'park'n'play' to two car parks. This may result in a concentration of vehicular movements around the particular points.

While the flow of traffic associated with the recreation reserve was touched on in the review of the masterplan for the reserve, this focussed primarily on vehicular movement within the reserve, rather than as part of cumulative traffic flows within the wider precinct. It is understood that further reviews of traffic associated with the recreation reserve are being undertaken and some resolution of these issues may occur as a result of this process.

9.2.3 'green centre' access

Initial ideas that had been generated for this project envisaged a continuation of Mildura's street grid into the Ontario-Flora precinct, namely the activation of the Fourteenth Street road reserve and a cross road from Eleventh Street to Fourteenth Street. An extension of Twelfth Street was also contemplated. These additional roads, in conjunction with the existing recreation reserve accessways would ensure excellent access to any new housing development and would open up access to this key 'green' space. Creating a network of intersections would also reduce the congestion that currently occurs around some of the recreation reserve entrances by allowing a dispersion of traffic within the precinct. An extension across Dyer would also have allowed the installation of an additional signalised intersection, with flow on effects to the speed and therefore safety on Eleventh Street.

Consultation with the community revealed strong opposition to additional roads through the Old Aerodrome Recreation Reserve and plans were adjusted to reflect this feedback.

In responding to community sentiment the plan now shows very limit access into the 'green centre'. Twelfth Street is shown extended north to provide an additional access point to the car parks in the southern portion of the reserve. This will reduce pressure on the Eleventh Street entrance, and potentially allow the construction of an additional carpark to the south if required in the future. Access is provided to the proposed new residential area via the partial activation of Fourteenth Street and internal and perimeter roadways in the estate. These roadways allow the development to address the parkland rather than 'turn its back'. Residents in these areas will have cycle and pedestrian access to the 'green centre', but additional vehicular movement through this green centre has been avoided.

10 environmental and cultural considerations

As detailed within policy contained at Clause 21.04 of the Mildura Planning Scheme it is important that new development does not compromise the integrity, function or appearance of historical sites and key natural and built features that provide the municipality with its sense of identity and unique character. There are four main environmental and cultural considerations within this precinct which any proposed land use vision or framework must respond. Each of these is discussed further below. However, within Clause 21.04 it is also Council policy to support appropriate opportunities for nature conservation, recreation and tourism developments.

10.1 lake ranfurly

The two main aspects of Lake Ranfurly which must influence the outcome of this study are the ecological health and function of the lake and the effect on an endangered species known to inhabit the lake environs.

10.1.1 ecological function

Lake Ranfurly has received little water in recent years which has contributed to the apparent degradation of the lake adjacent to the study area. Previous strategic documents, including the *Sunraysia Drainage Strategy* have highlighted the problems faced by Lake Ranfurly and proposed potential solutions to these issues.

Given Council has a responsibility "to conserve and enhance heritage places and items of natural, archaeological, architectural, cultural and historical significance", the protection and/ or rehabilitation of Lake Ranfurly is an important consideration, despite the land lying outside the boundary of the study area. Clause 22.05 of the Mildura Planning Scheme identifies the need to manage issues associated with the interface between public and private land. In this case, the study must address the interface with Lake Ranfurly, and more particularly, the impact any development on the land may have on the function of the lake.

Lake Ranfurly is one of fourteen nationally significant wetlands or wetland systems in the Mallee CMA region and is listed in the *Directory of Important Wetlands in Australia* (EA 2001). The *Sunraysia Drainage Strategy* recommends the development of wetlands around Lake Hawthorn and Lake Ranfurly to treat urban runoff to these lakes. The development of Lake Ranfurly East Wetland was identified as one of 7 priority systems within this adopted strategy. Given the reduction in water that is flowing to Lake Ranfurly and the importance of this wetland, it is clear that Council will need to work together with the CMA to increase the health of this lake. The framework prepared as part of this study will benefit Lake Ranfurly in a number of ways:

- By providing increased residential densities in proximity (noting that there is a significant separation between the lake environs and the area proposed for rezoning). This allows for the integration of storm and wastewater management systems which can increase flows to Lake Ranfurly. The incorporation of water sensitive urban design is preferred to capture and reuse technologies within this part of the precinct.
- Part of the WSUD required under any DPO could include contribution to the construction of a wetland area between any new residential area and the lake itself.
- By allowing access to part of the lake, in a formalised manner. Provision of access to, and information about, Lake Ranfurly is crucial to raising community awareness about this important environmental asset. An access road allow for a car parking area to be provided, which could eventually incorporate information stands. Tracks (preferably in the form of boardwalks) could run from this car park into the lake area.
- These tourism opportunities could also be supported by the linking of Lake Ranfurly to other significant water features in the area, such as the Bob Corbould Wetland and the Murray River.
- Some activation of this area also provides the opportunity to rehabilitate some of the wetland area in proximity to this precinct, potentially eventually linking the Bob Corbould wetland to the south. This will also assist is forming a buffer and filter between urban uses (such as residential dwellings and the landfill) and the lake.

10.1.2 hooded scaly-foot (pygopus schraderi)

Currently there are only four extant populations of the Hooded Scaly-foot Lizard known in Victoria. One of these populations lives within the environs of Lake Ranfurly. The lizard is listed as 'threatened' under the Flora and Fauna Guarantee Act 1988 and is classified as 'critically endangered in Victoria. As such the plan has a responsibility to ensure that impacts on this population are carefully managed.

Options for rehabilitation of the land adjoining Lake Ranfurly could contribute to a greater chance of survival for this endangered species. A co-ordinated approach to development within the

Ontario-Flora Precinct, as detailed within this report offers a good chance for increasing the population.

The urban design framework proposed here sees a low scale accessroad developed on the northern portion of the Fourteenth Street road reserve, which serves as a clear boundary between the 'urban' area, which will be developed by housing at varying densities, and the lake environs. The block of land adjacent to this road is constrained by flooding overlays but Council could investigate leasing a portion of this land to develop a car park which could form the start of walking trails and an information centre to increase awareness of the hooded scaly-foot, and any other animals which live in the area. While there is some trade-off between allowing additional persons to use this area, the partial activation of this area will potentially enable some rehabilitation to be undertaken in the area (which would outweigh other issues, which could be managed through use of formal tracks, fencing etc). Partnership with State or Federal Governments may be possible in this area.

However, it should be noted that detailed commentary on the matter was not provided as DSE advised that they could not provided further comment on whether or not development in the area would be supported without further detail. DSE also indicated there may be Federal Government involvement in any process given the status of the species.

10.2 murray river

Given the importance of the Murray River to both Mildura, the wider region, and indeed Australia as a whole, the protection of this river is a key planning consideration. This means that any development proposed in proximity to the river must respond, not only to the constraints (such as flooding), but also the opportunities. Council is also committed to ensure that future urban development does not contribute to, nor is affected by, the negative impacts associated with salinity and rising water tables. The planning scheme identifies that:

"Extensive development along the river has brought with it a series of problems including: increased salinity and nutrient levels; reduced water availability downstream; out breaks of blue green algae; pollution of the river; changes to flood regimes; the threat of flood waters overtopping levees, and the loss of habitats and flora and fauna species."

For this reason the land use vision for this precinct has sought to implement a clear transition in the intensity of development relative to proximity to the riverine environment. Requests to rezone land proximate to the river for Low Density Residential were not considered to be strategically justified when the potential impact on the river were taken into account.

Existing activities within this area are limited to some low scale agricultural uses, low density residential development and a caravan park. The application of a Rural Conservation Zone to this land allows for the ecological, landscape and cultural values of this land to be prioritised. However, the land can now be utilised for a wider range of activities provided they respond to the conservation values, which will hopefully assist in improvements to the presentation of much of this land.

10.3 aboriginal cultural heritage

As highlighted in Clause 21.0-1 the municipality and the region has in excess of 3,800 aboriginal sites of historical and cultural significance dating well back to before the first European pioneers arrived in the region at Wentworth in the 1840's. Many significant aboriginal and non-aboriginal cultural and historic sites can be found on public land within the municipality.

This is true also for the Ontario-Flora Precinct, as can be seen on the map below. The areas of green indicate likely locations of aboriginal artefacts. The map highlights areas around what was previously know as Rifle Butts Swamp (now the Bob Corbould wetland), along the banks of the Murray, around Lake Ranfurly and on the raised area of land to the north of the study area. Any land identified in green on the map is required to undergo a cultural heritage assessment prior to any development.

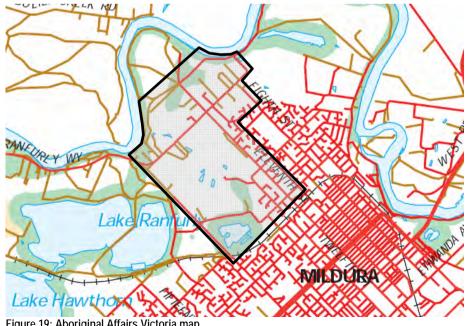


Figure 19: Aboriginal Affairs Victoria map

11 stakeholder input

A series of consultation sessions were undertaken in the preparation of this strategy. Targeted consultation was undertaken in Mildura though separate workshops held with various stakeholder groups including:

- Council officers;
- Mildura Rural City Councillors;
- Key agencies and government departments;
- Key landowners; and
- The general community.

Additional ongoing consultation was undertaken with key stakeholders throughout the project in a more informal environment.

The consultation workshops identified above involved a presentation of the existing conditions within the precinct and an evolution of the key opportunities and constraints that would influence the future direction of this area.

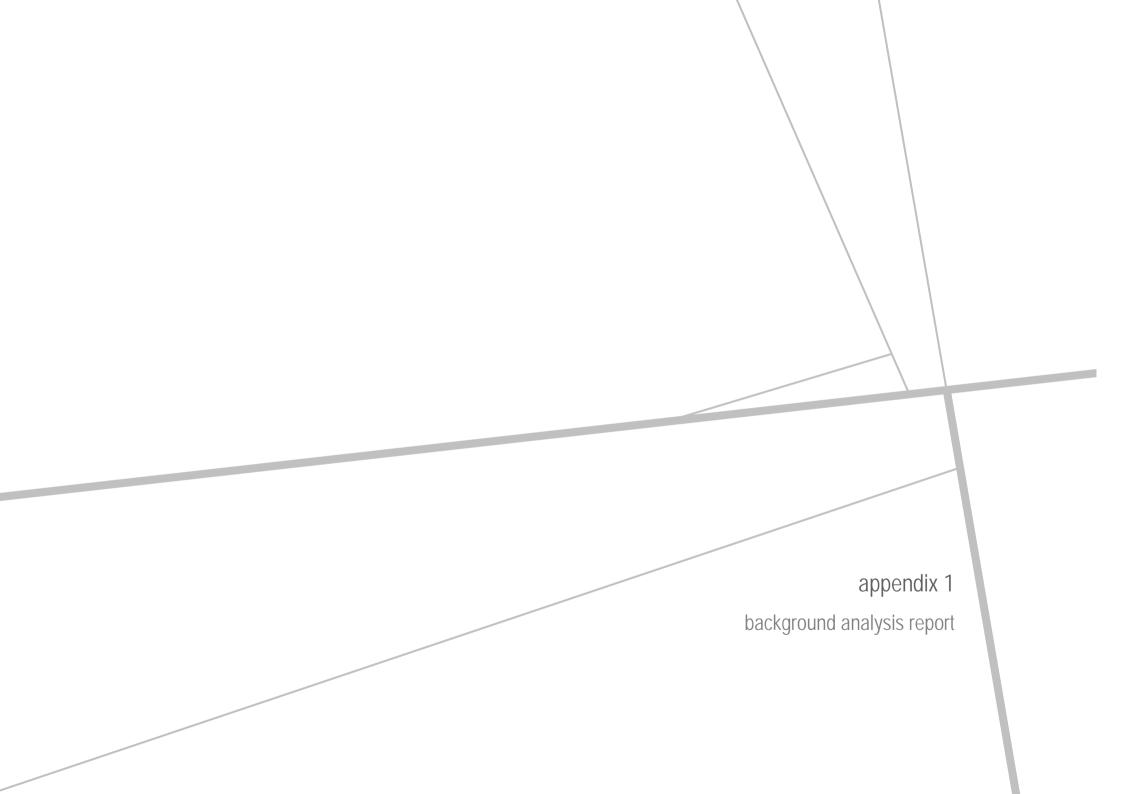
A summary of the major issues identified through the consultation process is identified in the following points:

- Inappropriate zoning exists within and around the Study Area, particularly the Public Parks and Recreation Zoning of the St. Joseph's indoor sporting facility and the Golf Club Resort.
- The north-western gateway to Mildura is insufficiently defined.
- There are poor connections between the residential areas of Mildura and Lake Ranfurly and the Murray River.
- Access and pedestrian safety appear to be an issue, particularly along Eleventh Street.
- There are highly attractive landscape characteristics within the area which mean demand for dwellings in the area is likely to be reasonably high.
- Most lots within the study area appear to have been developed, with the exception of the vacant parcel to the immediate west of the golf course.
- Flooding issues will strongly influence development potential of land within the study area.

Having regard to the above, a series of principles were generated to guide the direction for the area in the future:

- Ensure attractive north-west gateway to Mildura urban area.
- Ensure a more definitive western city edge.
- Unify appearance and links between Golf Course and Recreation Reserve.
- Ensure a positive interface to the Recreation Reserve and the Golf Club areas and adjoining urban land.
- Improve connections to and through the precinct including links to the lake and river.
- Limit the impact of flooding on housing and optimise potential of elevated land.
- Define a 'precinct' of quality housing of various densities in a recreation/ leisure/ landscape setting.
- Minimise impact and soften interface with landfill.
- Expand and diversify role and image of recreational assets.
- Vary residential densities to complement and pay for urban infrastructure improvements.

Subsequent to these consultation sessions, the project responded to strong concern expressed by the community regarding accessways though the recreation reserve and the strong desire on the part of some members of the community for construction on the Fourteenth Street road reserve.







aila victoria medal 2008 australian institute of landscape architects (victorian state group)

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ontario – flora precinct land use vision and urban design framework analysis and assessment report

prepared for mildura rural city council

by hansen partnership

october 2009 FINAL DRAFT

urban planning | urban design | landscape architecture

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1 introduction

hansen partnership, in association with Hyder Consulting and Tim Nott Economics, has been engaged by Mildura Rural City Council to prepare a Land Use Vision and Urban Design Framework for a precinct to the north-west of Mildura's CBD.

The precinct contains a mix of different land uses and ownership tenures, with a number of masterplans having been prepared for parcels within the study area. Much of the impetus for this project is a desire on Council's part to see these separate plans, which consider parcels in isolation, unified to create a functional precinct. This will be achieved, not only by ensuring appropriate parcels of land are correctly zoned, but also through the creation of an urban design framework to guide the form of future development within the precinct

This analysis and assessment report provides a summary of existing conditions and highlights factors that have the potential to influence the future development of he precinct. This report has been prepared on the basis of information gathered through the following methods:

- Review of existing background information as provided by Mildura Rural City Council.
- Consultation with key landowners, service authorities, Councillors and Council officers.
- Field work and observation of the existing conditions of the study area.



ontario and flora precinct, mildura

land use vision and urban design framework

2 the study area

The study area is approximately 465 hectares of land to the west of the Mildura CDB comprising a mixture of urban, agricultural and recreational areas. The study area is bounded by Fourteenth Street to the south-west, Ontario Avenue to the south-east, and the threshold of the Murray River bank to the north. To the north east, the Study Area extends to the area utilised for the sewerage treatment plant and includes a portion of the Ularara Estate where it adjoins Eleventh Street. It is also important to note that the western portion of this area forms a key gateway to the city of Mildura for those entering from Merbein and Wentworth.

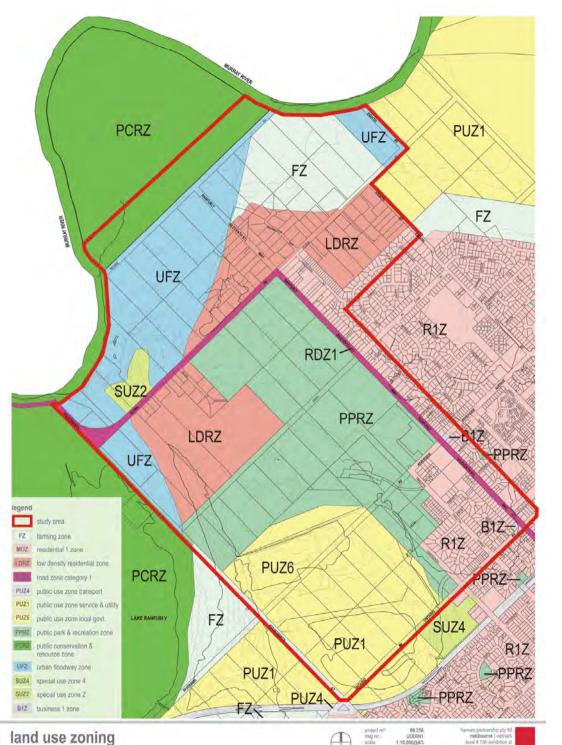
A key feature of the study area is the inclusion of significant areas of public land including the Old Aerodrome Recreation Reserve, the Bob Corbould Wetland, and important other facilities including Mildura Landfill. The privately owned Mildura Golf Club Resort also occupies a significant portion of this land, and a 100 lot residential subdivision has recently been approved on this site. There are also existing areas of residential development of various densities to the eastern and northern sectors of the precinct. There are a number of vacant sites to the west of the Golf Course.

The area, to date, has been characterised by relatively ad-hoc development with recent development approvals and a number of studies within the area which have limited consideration with each other.

The area is an attractive one, with the proximity to the Mildura Landfill being offset by the extensive green and open space and the proximity to the Murray River. The precinct is also characterised by a number of inappropriate zoning regimes, whereby private land is zoned for public use.

figure 1; the study area

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the planning framework 3

3.1 zoning

The precinct comprises of a number of zoning regimes (refer to figure 2; land use zoning). It is noted that some of these zones appear to have land uses occurring within them which are contrary to the intent of the zone. The following zones are included in the study area and their purpose is listed below:

Residential 1

The purposes of the Residential 1 Zone are:

- To provide for residential development at a range of densities with a variety of dwellings to meet the housing needs of all households.
- To encourage residential development that respects the neighbourhood character.
- In appropriate locations, to allow educational, recreational, religious, community and a limited range of other non-residential uses to serve local community needs.

The Mildura Planning Scheme contains no variations to the Residential 1 Zone Schedule.

Low Density Residential

The purpose of the Low Density Residential Zone is:

To provide for low-density residential development on lots which, in the absence of reticulated sewerage, can treat and retain all wastewater.

The Mildura Planning Scheme contains no variations to the Low Density Residential Zone Schedule.

Public Park and Recreation Zone

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The purposes of the Public Park and Recreation Zone are:

- To recognise areas for public recreation and open space.
- To protect and conserve areas of significance where appropriate.
- To provide for commercial uses where appropriate.

4

Public Use Zone

The purposes of the Public Use Zone are:

- To recognise public land use for public utility and community services and facilities.
- To provide for associated uses that are consistent with the intent of the public land reservation or purpose.

Under the Mildura Planning Scheme Public Use Zone 1 is used to designate areas utilised for 'Service and Utilities' (in this case the Bob Corbould Wetland which serves as a drainage basin). Public Use Zone 6, which covers the landfill area, is used to designate 'Local Government' uses.

Public Conservation and Resource Zone

The purposes of the Public Conservation and Resource Zone are:

- To protect and conserve the natural environment and natural processes for their historic, scientific, landscape, habitat or cultural values.
- To provide facilities which assist in public education and interpretation of the natural environment with minimal degradation of the natural environment or natural processes.
- To provide for appropriate resource based uses.

Within the study area the land surrounding both the Murray River and Lake Ranfurly fall under this zoning.

Road Zone Category 1

Eleventh Street and Flora Avenue leading to Merebin are zoned as Category 1 roads. The purposes of the Road Zone, Category 1 are:

- To identify significant existing roads.
- To identify land which has been acquired for a significant proposed road.

These roads are managed by VicRoads, and any proposed changes to the function of these roads must be approved by this referral body.

Farming Zone

The purposes of the Farming Zone are:

To provide for the use of land for agriculture.

- To encourage the retention of productive agricultural land.
- To ensure that non-agricultural uses, particularly dwellings, do not adversely affect the use of land for agriculture.
- To encourage use and development of land based on comprehensive and sustainable land management practices and infrastructure provision.
- To protect and enhance natural resources and the biodiversity of the area.

There are a number of modifications to the schedule of the Farming Zone included within the Mildura Planning Scheme in relation to minimum areas and setbacks.

Urban Flood Zone

The purposes of the Urban Flood Zone are:

- To identify waterways, major floodpaths, drainage depressions and high hazard areas within urban areas which have the greatest risk and frequency of being affected by flooding.
- To ensure that any development maintains the free passage and temporary storage of floodwater, minimises flood damage and is compatible with flood hazard, local drainage conditions and the minimisation of soil erosion, sedimentation and silting.
- To reflect any declarations under Division 4 of Part 10 of the Water Act, 1989.
- To protect water quality and waterways as natural resources in accordance with the provisions of relevant State Environment Protection Policies, and particularly in accordance with Clauses 33 and 35 of the State Environment Protection Policy (Waters of Victoria).

The application of the Urban Floodway Zone is usually limited by to its highly restrictive nature.

Business 1 Zone

The purpose of the Business 1 Zone is:

 To encourage the intensive development of business centres for retailing and other complementary commercial, entertainment and community uses.

There is a maximum combined leasable floor area (m2) for office (other than electoral office) of 500 square metres per lot identified within the Schedule to the Business 1 Zone in the Mildura Planning Scheme.

Special Use Zone

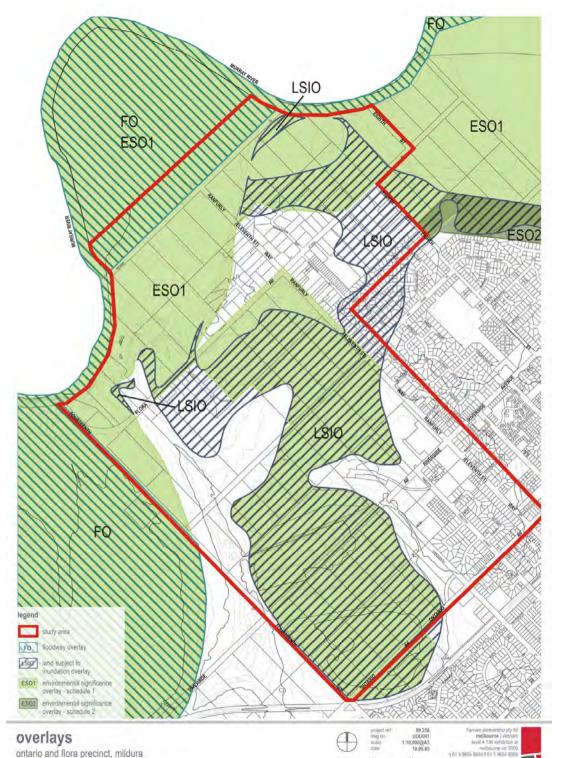
The purpose of the Special Use Zone is:

• To recognise or provide for the use and development of land for specific purposes as identified in a schedule in this zone.

The Special Use Zone within the Study Area is to the north of Flora Avenue (SUZ Schedule 2), which relates to 'Tourist Facilities'. The purpose of this zoning is:

- To provide for a range of tourist experiences which help reinforce the role of Mildura as a
 popular tourist destination. To ensure the continued operation and viability of tourist
 activities in the municipality.
- To encourage development which complements the Mildura Arts Centre and Rio Vista Park as major cultural, tourist and entertainment facilities; and which takes advantage of and enhances the Murray River.

This zone appears to have been implemented to cover the previous zoo which existed on the site as the boundary of the SUZ does not correspond with the location of the Caravan Park which is located at 199 -205 Flora Avenue, although the zoning could potentially be considered appropriate for that use.



land use vision and urban design framework

3.4 overlays

The Study Area is affected by three primary overlays including Floodway Overlay (FO), Land Subject to Inundation (LSIO) and Environmental Significance overlay (ESO1) – refer to **figure 3**; **overlays**

Floodway Overlay

The purpose of a Floodway Overlay is as follows:

- To identify waterways, major floodpaths, drainage depressions and high hazard areas which have the greatest risk and frequency of being affected by flooding.
- To ensure that any development maintains the free passage and temporary storage of floodwater, minimises flood damage and is compatible with flood hazard, local drainage conditions and the minimisation of soil erosion, sedimentation and silting.
- To reflect any declarations under Division 4 of Part 10 of the Water Act, 1989 if a declaration has been made.
- To protect water quality and waterways as natural resources in accordance with the provisions of relevant State Environment Protection Policies, and particularly in accordance with Clauses 33 and 35 of the State Environment Protection Policy (Waters of Victoria).

Under the FO a permit is required for building and works and for subdivision. In addition, any application must be accompanied by a flood risk report, given there is no floodplain management plan for the area, and the application must be referred to the floodplain management authority for approval.

Land Subject to Inundation Overlay

The purpose of a Land Subject to Inundation Overlay is:

- To identify land in a flood storage or flood fringe area affected by the 1 in 100 year flood or any other area determined by the floodplain management authority.
- To ensure that development maintains the free passage and temporary storage of floodwaters, minimises flood damage, is compatible with the flood hazard and local drainage conditions and will not cause any significant rise in flood level or flow velocity.
- To reflect any declaration under Division 4 of Part 10 of the Water Act, 1989 where a declaration has been made.

 To protect water quality in accordance with the provisions of relevant State Environment Protection Policies, particularly in accordance with Clauses 33 and 35 of the State Environment Protection Policy (Waters of Victoria).

Under the LSIO a permit is required for building and works and for subdivision. In addition, any development must be in accordance with any floodplain management plan for the area, and the application must be referred to the floodplain management authority for approval.

Environmental Significance Overlay

The purpose of an Environmental Significance Overlay is:

- To identify areas where the development of land may be affected by environmental constraints.
- To ensure that development is compatible with identified environmental values.

Schedule 1, which affects this land, is titled 'Murray River Corridor'.

Under this overlay a permit is required to construct a building or construct or carry out works, to subdivide land, construct fences, bike paths or trails or to remove, destroy or lop any vegetation.

A series of guidelines can be found within this Schedule which aim to achieve the following objectives:

- To protect the environs of the Murray River recognising its importance for nature conservation, flooding, economic development, recreation and tourism.
- To prevent use and development of land adjoining the river from degrading water quality.
- To promote consistent planning and management along the River corridor.
- To prevent the loss of riparian flora and fauna, biodiversity, habitat and wetland environments.
- To protect the values and role of the Murray River reserves and other public land as floodplains and as buffer areas for nutrients and other pollutants.
- To restrict inappropriate use and development on land adjoining and near the River.
- To assess the use or development of land adjoining the Murray River corridor according to the capacity of the proposal to protect the environmental and landscape qualities of the River environs in accordance with sustainable development principles.

- To specifically address land degradation processes including erosion, native vegetation decline, pollution of ground or surface water, groundwater accession, salinisation and soil acidity, and adverse effects on the quality of land and water habitats.
- To ensure that buildings are sited a sufficient distance from the Murray River so as to:
 - maintain and improve water quality;
 - minimise hazard risk and the redistributive effect on floodwater associated with the erection of buildings on the floodplain;
 - protect the scenic landscape of the riverine corridor;
 - improve bank stability; and
 - protect biodiversity and conserve wildlife habitat.

3.5 state policies

The following State policies are considered to be potentially relevant to the Study Area and the objectives outlined below should be supported by any future Land Use Vision and Urban Design Framework:

CLAUSE	OBJECTIVES
Clause 14 - Settlement	The objectives of this clause are to ensure a sufficient supply of land is available for residential, commercial, industrial, recreational, institutional and other public uses and to facilitate the orderly development of urban areas.
Clause 15.01 - Protection of catchments, waterways and groundwater	The objective of this clause is to assist the protection and, where possible, restoration of catchments, waterways, water bodies, groundwater, and the marine environment. Under this clause planning authorities should work closely with catchment management authorities and other relevant bodies to ensure protection.
Clause 15.02 - Floodplain management	This clause seeks to assist the protection of life, property and community infrastructure from flood hazard, the natural flood carrying capacity of rivers, streams and floodways, the flood storage function of floodplains and waterways and also protect floodplain areas of environmental significance. Under this clause all areas affected by 1 in 100 year floods must be shown on planning scheme maps.
Clause 15.09 - Conservation of native flora and fauna	To assist the protection and conservation of biodiversity, including native vegetation retention and provision of habitats for native plants and animals and control of pest plants and animals, this clause contains a number of overarching principles that should guide development.
Clause 15.10 - Open space	This clause is intended to promote the creation of a diverse and integrated network of public open space commensurate with the needs of urban communities and rural areas. Under this clause Planning and responsible authorities should ensure that open space networks:
	 Are linked through the provision of walking and cycle trails and rights of way;
	 Are integrated with open space contributions from abutting subdivisions; and
	 Incorporate, where possible, links between major parks and activity areas, along waterways and natural drainage corridors, connecting places of natural and cultural interest, as well as maintaining public accessibility on public land immediately adjoining waterways and coasts.
Clause 15.12 - Energy efficiency	Seeks to encourage land use and development that is consistent with the efficient use of energy and the minimisation of greenhouse gas emissions. Under this clause planning and responsible authorities are directed to promote energy efficient building and subdivision design, promote consolidation of urban development and integration of land use and transport and encourage retention of existing vegetation or revegetation as part of subdivision and development proposals.

CLAUSE	OBJECTIVES
Clause 16 - Housing	This clause encourages subdivisions in locations with access to physical and community infrastructure and providing a range of lot sizes, a convenient and safe road network, appropriate pedestrian and cycle paths, sufficient useable public open space and low vulnerability to fire. It also promotes residential development that is cost-effective in infrastructure provision and use, energy efficient, incorporates water-sensitive design principles and encourages public transport use. Opportunities for increased residential densities to help consolidate urban areas are also encouraged.
Clause 17.05 - Agriculture	Seeks to ensure that the State's agricultural base is protected from the unplanned loss of productive agricultural land due to permanent changes of land use and to enable protection of productive farmland which is of strategic significance in the local or regional context.
Clause18.02 - Car parking and public transport access to development	This clause aims to ensure access is provided to developments in accordance with forecast demand taking advantage of all available modes of transport and to minimise impact on existing transport networks and the amenity of surrounding areas. Under this clause, consideration should be given to all modes of travel, including walking, cycling, public transport, taxis and private vehicles (passenger and freight) in providing for access to new developments.
Clause 18.03 - Bicycle transport	The objective of this clause are to integrate planning for bicycle travel with land use and development planning and encourage cycling as an alternative mode of travel.
Clause 18.09 - Water supply, sewerage and drainage	This clause directs the Responsible Authorities to plan for the provision of water supply, sewerage and drainage services that efficiently and effectively meet State and community needs and protect the environment. Under this clause, urban development must be provided with sewerage at the time of subdivision, or lots created by the subdivision must be capable of adequately treating and retaining all domestic wastewater within the boundaries of each lot consistent with the Guidelines for Environmental Management - Septic Tanks Code of Practice, Publication 891 (EPA 2003) and State environment protection policy (Waters of Victoria).
Clause18.12 - Developer contributions to infrastructure	The objective of this clause is to facilitate the timely provision of planned infrastructure to communities through the preparation and implementation of development contributions plans. Development Contributions Plans, prepared and approved under the Planning and Environment Act 1987, should be used to manage contributions towards infrastructure and should be prepared in accordance with the DSE Development Contribution Guidelines
Clause 19.01 - Subdivision	Seeks to ensure the design of subdivisions achieve attractive, livable and sustainable neighbourhoods and to control the subdivision and consolidation of land and the removal and variation of easements and restrictions through planning schemes, within the framework of the <i>Planning and Environment Act 1987</i> and the <i>Subdivision Act 1988</i> . Under this clause the development of new residential areas and in the redevelopment of existing areas, subdivision should be designed to create livable and sustainable communities by adhering to a range of guidelines included within Clause 19.01.

CLAUSE	OBJECTIVES
Clause 19.03 - Design and built form	The objective of this clause is to achieve high quality urban design and architecture that:
	 Reflects the particular characteristics, aspirations and cultural identity of the community.
	 Enhances livability, diversity, amenity and safety of the public realm.
	 Promotes attractiveness of towns and cities within broader strategic contexts.
	This will be achieved by following a range of guidelines group into the following categories of context, public realm, safety, landmarks views and vistas, pedestrian spaces, heritage, consolidation of sites and empty sites, light and shade, energy and resource efficiency, architectural quality, and landscape architecture.

3.6 local policies

The following local policies clauses are considered relevant to the Study Area and any departure fro the policy contained within these clause should have robust strategic justification.

CLAUSE	OBJECTIVES
Clause 21.01-1 - Settlement and Housing	This clause provides an overview of settlement patterns within the municipality, identifying growth patterns and areas where development is preferred. The importance of infrastructure to development is also highlighted.
Clause 21.02 - Key Influences	Key influences on planning within the region are highlighted, among them the high levels of residential growth, the need to protect areas of environmental significance and the threat of salinity to urban development.
Clause 21.03 - Vision and Strategic Land use	Outlines Councils vision, as follows:
Framework	• Our Vision for the PEOPLE of our communities is that we will be the most liveable, people friendly municipality in Australia.
	 Our Vision for the DEVELOPMENT of the Municipality is that all of our communities will have plans, infrastructure and utilities to proactively attract and support ongoing future development. Planning will be integrated to support the development of an inclusive community.
Clause 21.04-2 - Strategic Directions: Settlement	This clause contains a number of objectives relating to the settlement of Mildura. Among the most relevant are:
	Objective 1- To facilitate orderly development.
	 Reinforce the development of Mildura as the key service centre of the Region providing a wide range of community and commercial services along with residential, industrial, commercial and community development opportunities.
	 Facilitate the urban expansion of Mildura, Mildura South and Irymple as the prime residential growth areas of the municipality and wider region.
	 Requiring the preparation of development plans prior to subdividing land for residential uses.
	Ensuring new develop has access to stormwater infrastructure.
	 Support well designed infill residential development and urban consolidation within the existing residential areas of Mildura and Irymple.
	Ensure that there is at least a 10 year supply of vacant zoned residential land able to readily access required infrastructure.
	 Ensure that the residential growth areas of Mildura, Mildura South and Irymple are contiguous with existing residential estates and in locations that reflect logical and cost effective infrastructure servicing options.
	Implementing strategic directions contained within Structure Plans.

CLAUSE	OBJECTIVES
	Objective 2- To provide, maintain and make efficient use of infrastructure and community facilities.
	 Provide drainage and other relevant infrastructure on at least two or ideally three development fronts within the Mildura, Mildura South and Irymple urban areas (emphasis added).
	 Support proposals for residential development that can be serviced by Council's infrastructure program as indicated on the Town Structure Plans in preference to on-site infrastructure provision.
	 Focussing development around existing community infrastructure and services.
	 Encouraging the application of water sensitive design principles in subdivision and development.
	Objective 3 -To provide a diversity of housing styles and living opportunities.
	 Encouraging future residential development at a range of lots sizes and densities (including medium density development) in appropriate locations, particularly in close proximity to town activity centres.
	 Encourage a diversity of housing styles and densities reflecting changing market demands and recent trends such as the development of units and smaller housing lots.
	Accommodating the demand for rural residential and low density residential development in planned estates.
	Objective 4 - Minimise the potential for future land use conflicts.
	 Limit the location of sensitive land uses in the vicinity of industries or other activities with significant off site effects such as noise, traffic and residual air emissions. (authors emphasis added).
	Strategies to implement the above policy directions include:
	 Applying Development Plan Overlay 1 (DPO1) to undeveloped land zoned Residential 1.
	Applying Development Plan Overlay 2 (DPO2) to undeveloped land zoned Low Density Residential.
	However, the above strategy does not appear to have been implemented in relation to the undeveloped LDR land within the Study Area.
	This clause also contains the Mildura Structure Plan which shows the Study Area as falling partially beyond the 2030 'Residential Growth Boundary, with the relevant section shown below.
Clause 22.05 - Public Lands Policy	This policy applies to all land which abuts the Public Conservation and Resource Zone (PCRZ). Under this clause it is policy that urban or other intensive forms of use or development adjacent to public land be minimised where such use or development could have a detrimental impact on public land values.

MILDURA TOWN STRUCTURE PLAN

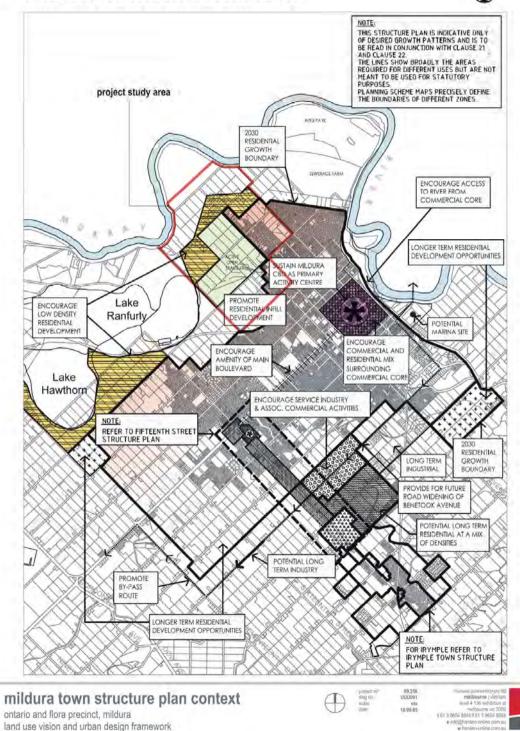


figure 4; Mildura structure plan and study area context

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3.7 planning scheme amendments

3.7.1 amendment c28

Amendment C28 was the subject of a Planning Panel report in February 2005 by Members McKenzie and Gibson. The amendment sought to implement the recommendations of the "Three Year Review" of the Mildura Planning Scheme. It was a major planning amendment which set out the parameters for future growth within the municipality and translated strategic policies underpinned by detailed background reviews into statutory responsibilities. The amendment involved extensive changes to local policy, the zoning of land and the application of overlays. The panel report recommended that the local policies, zoning and overlays exhibited as part of Amendment c28 be adopted, as they have been since.

In relation to the areas covered by this land use and urban design framework plan the following is of relevance:

- Many of the submission relating to the rezoning of residential land related to the lack of choice provided by the development areas chosen by Council which were distorting the market. The Panel did not find any evidence of this.
- One of the major constraints to the development of Residential 1 zoned land within Mildura is the availability of infrastructure, particularly drainage infrastructure.
- The Panel considered there were sufficient areas within Mildura that were not affected by a LSIO that development at conventional densities should not be encouraged within land affected by an LSIO.
- In relation to Flora Avenue, the Panel recommended that the LDRZ be retained but that the possibility of altering the schedules to this zone be raised with DPCD. A figure of 2000sqm – 3000sqm was raised. (note: this has occurred and DPCD has indicated they are not willing to explore this option)
- Panel found that subdivisions of less than 0.4h could be supported.
- Further development of low density residential estates in and around Flora Avenue was supported.
- An extension to the ESO1, which relates to the Murray River Corridor, was put in place to cover a larger amount of land. The matching of ESO1 with the extent of the LSIO was considered both 'laudable' and 'logical' by the Panel.

- Panel also recommended the removal of ESO1 where it applied to any land zoned Residential, Business or Industrial.
- With a few minor exceptions, the panel was very supportive of the proposed amendment which it considered would assist in the orderly planning and development of the municipality. The amendment was adopted in its final form, incorporating changes recommended by the planning panel, by Council in March 2005.
- It is noted that many of the issues raised in relation to the rezoning of land to Residential 1 Zone within the Ontario – Flora Precinct were raised previously when the new zoning regimes were introduced and again during the Panel Hearing for Amendment C8. At these points the proposed rezoning was not supported by the Panel. This related primarily to the lack of strategic justification provided to the Panel.

3.7.2 amendment c8

Amendment C8 was the subject of a Planning Panel report in 2002 by Members Lee and Scale. The amendment sought to rezone the low density residential land between the Mildura Golf Course and Flora Avenue to a Residential 1 Zone, with a Development Plan Overlay to be control the form of development and associated changes to the Mildura Planning Scheme. The Panel strongly rejected the proposed amendment due to insufficient strategic justification, and the contradiction of existing local policy. Of note is the following:

- Panel in particular highlighted the lack of strategic justification provided in relation to the residential land supply in Mildura and felt that the justification for this land being rezoned/ developed before other land in the Mildura area was not adequately addressed.
- "The panel accepts that, subject to determining the final layout, density and servicing of the land, the subject land and area has the potential for residential land use [at conventional densities]. The area appears to be an area that has market potential for quality residential development near a range of natural features and services."
- The use of a Development Plan to guide development was strongly supported by the Panel.
- Panel supported the minimum lot size of 2000sqm for the area affected by flooding as proposed by the Mallee Catchment Management Authority.
- Panel considered that servicing issues could be dealt with at the development stage, but accepted that, in principle, all service could be provided to this land. Although, it is noted they would have preferred more information relating to the drainage management of the area.

Relevant strategic studies are as follows:

- Mildura Strategic Bicycle Plan (2002)
- Mildura Rural City Council Open Space Strategy (2003)
- Mildura Sporting Reserves Master Plan Strategy (2004)
- Site Salinity Management Plan (2009)
- Sunraysia Drainage Strategy (2002)
- Mildura Rural Residential Study (2001)
- Review of the Mildura & Irymple Residential Land Strategies (2003)

Mildura Strategic Bicycle Plan

This plan was intended to guide the development of bicycle infrastructure and priorities for future development. The plan developed a "Mildura Bicycle Network" to guide future development. The report contains a suite of detailed recommendations.

The report contained detailed analysis of all existing bicycle facilities in the municipality and recommendations for improvements. Within the Ontario - Flora Precinct:

- Ontario Avenue is designated as a secondary arterial route;
- Riverside Avenue is identifies as a local street requiring some upgrades due to the bicycle traffic generated by the sporting reserve;
- Eleventh Street within the precinct requires that the path be extended to allow cyclists to utilise the full length of this road.
- Fourteenth Street is identified as performing a secondary arterial function.

Mildura Rural City Council Open Space Strategy

This strategy was developed in 2003 to provide an integrated approach to the provision of open space within the municipality and to develop a 5 year plan. It was highlighted that, while Mildura's population is growing strongly, it is also ageing and there is thus likely to be an increased need for passive recreational spaces. In regards to open space it was considered that the environmental significance of the Murray River and remnant vegetation was important as were potential linkages between open spaces in urban areas, using waterways, drainage reserves and other linear connectors. The strategy directed that:

- There will be a hierarchy of local parks and safety will be given high priority;
- Priority target groups for park facilities will include young people, the elderly and people with disabilities; and
- Native vegetation will be protected and biodiversity protection pursued.

In relation to the Study Area, the following specific observations and recommendations were made:

"The Mildura West Precinct is well serviced with open space given its proximity to the riverfront reserves, Old Aerodrome Sporting Complex, plus Mansell Reserve, Washington Park and two smaller local parks situated within the precinct. No additional parks are required".

"Create a path around the Bob Corbould Wetland and eventually link through the Mildura Landfill (when in suitable condition) to the Mildura Golf Course and Old Aerodrome Sporting Complex and to the Three Chain reserve on Ranfurly Way."

The wider area also has an abundance of regional parks. The strategy contains a number of recommended principals for the future development of open spaces, including the need to develop the riverfront reserves around Ranfurly Way to ensure they are not destroyed by indiscriminate use. The strategy also provides guidelines for determining the scale and nature of open space contributions in new development areas and principles to guide the development of sporting reserves.

Mildura Sporting Reserves Master Plan Strategy

This Strategy was developed in 2004 by Garry Henshell & Associates to provide recommendations for future development within Mildura's major sporting reserves. Among these reserves is the Old Aerodrome Oval which falls within the Study Area of this project. This report offered observations and recommendations in relation to:

- Creating parkland facilities;
- Formalising Vehicular and Vehicular Circulation;
- Improving facilities; and
- Creating New Sporting Opportunities.

The Strategy also contains an implementation and staging plan and a costing for all works proposed. This masterplan has very recently been through a review process and been presented to Council for approval. It is worth highlighting that, while this facility offers a very high level of service to the Mildura and regional catchments, it is understood that Council's priority in developing sporting facilities is focused on the development of the Mildura South Sports Facility. Of key concern to this study are the following recommendations:

- There is some suggestion that the model car racing group which currently uses the area adjoining St Josephs facility be granted a permanent home in this position. This is not considered an appropriate location for nitro powered cars, given the approved residential subdivision immediately adjoining this land.
- An additional need of 4 hectares has been identified for future expansion. While this land
 is not currently required, the recommendation is that the land be acquired prior to any
 development on the adjoining land.
- A perimeter pathway is recommended, suitable for wheelchairs and with distance markers for joggers etc.

• There are also some issues with traffic flow within and into the reserve identified in this study, particularly from Flora Avenue.

Site Salinity Management Plan

This management plan has been prepared on behalf of Mildura Rural City Council to assist developers in understanding identifying and managing the risks involved in salinity in the Mildura area. The plan outlines the importance of addressing urban salinisation for new communities to be sustainable. It dictates that adequate assessment of the urban salinity risk presented by a proposed residential development should include determination of the site-specific soil and groundwater conditions, and subsequent salinity management measures should be developed to address the identified risk. The steps for identifying the level of risk of urban salinisation are as follows:

- Step 1: Application of Preliminary Assessment Tool
- Step 2: Verification of Preliminary Assessment
- Step 3: Required Level of Salinity Management
- Step 4: Salinity Action Statement

The plan also includes recommended uses and actions regarding the differing levels of risk. The appendices to the plan contain various options for salinity management. While the plan has been designed for primarily for use in the development areas to the south of the City of Mildura, the principals and actions contained within this plan are also relevant to any proposed development within the Ontario – Flora Precinct. The plan has been revised in 2009 (although this is still in draft version) and now includes a flow chart detailing the responsibilities of the MRCC and developers.

Sunraysia Drainage Strategy

This strategy was developed in response to community concerns regarding the rapid expansion of urban areas into adjacent irrigated lands and the need for a coordinated drainage strategy. The principal output of the strategy was a master plan which outlines how urban development and the existing irrigation development will be serviced with surface and subsurface drainage to the year 2050. This was intended to reverse trend towards the ad-hoc development of drainage infrastructure and to ameliorate the negative effects that increased conversion of irrigation to urban land use, and future reduction in irrigation drainage rates will have on the surrounding area.

The report indicated the following in regards to the Ontario – Flora precinct:

- Key finding included that urban runoff discharging to Lake Ranfurly East should be treated in wetlands prior to discharging. The existing disused sewerage lagoons on the shores of Lake Ranfurly should be retrofitted to form the wetland required to treat runoff to this water body (this was costed at \$60,000).
- The report also highlighted the relatively low levels of reuse occurring and recommended this quantity be increased.

Mildura Rural Residential Study

This study was intended to comprehensively assess and review the provision of rural residential lots to assess the need for more rural residential or low density residential lots.

Stage 1 of the assessment found that Council had a short fall of Low Density land in the order of approximately 95 hectares. Possible locations for rezoning to address this shortfall were subsequently identified within Stage 2 of the project. The Study also reviewed previous rezoning requests. It was identified that between 1996 and 2000, there was approximately 14 building approvals per annum for dwellings in planned low density residential estates. This was identified as being linked to a lack of access to this style of lot, rather than a lack of demand.

Within this study the area around Flora Avenue was identified as Area 4, and it was identified that 38.6ha remained for development with low density housing. However, it was also identified that the area may be suitable for rezoning to Residential 1 land (to be assessed as part of Amendment C8) and that the landowners were unlikely to proceed with low density residential development. As such the land was not included within calculations on provision of low density residential land into the future. The study did indicate that Area 4: Flora Avenue, was one of three areas recommended for rezoning to Residential 1 Zone.

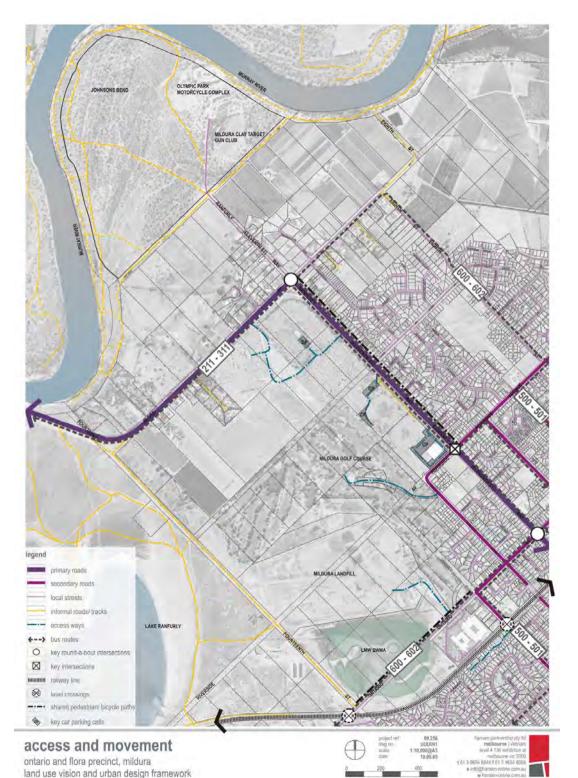
As a result of the subsequent study, an additional 137.5 hectares was recommended for rezoning to LDR comprising:

- 35.7ha in Sandilong Avenue, Irymple
- 29.2ha south of Lake Hawthorn
- 72.6ha at Nichols Point

It is noted that this exceeds the shortfall identified and the study also recommended a number of further areas, totaling 372.1ha, for rezoning to LDR once the above land has been taken up.

Review of Mildura & Irymple Residential Land Strategies

This review assessed existing residential strategies and provided comment on any required changes to planning policy. The review found that additional land needed to be rezoned to accommodate the projected demand for residential land. This formed the basis for Amendment c28.



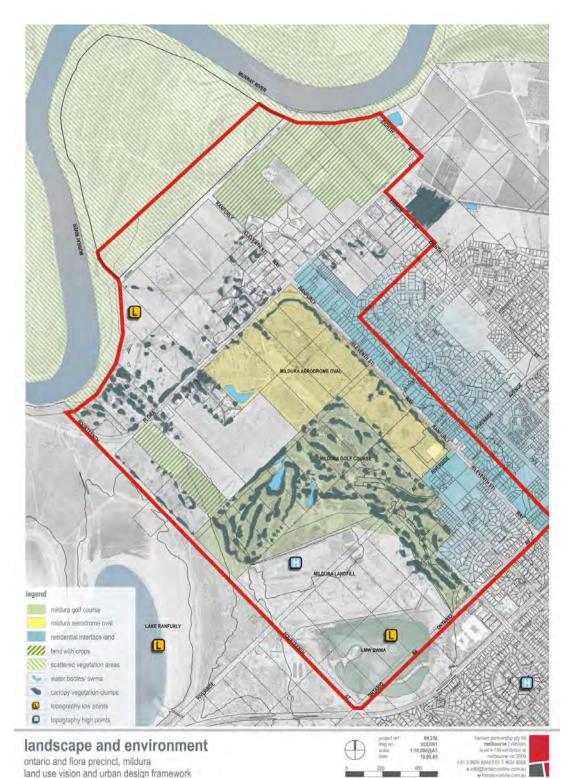
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4 background analysis

4.1 access and movement

- Eleventh Avenue and Flora Avenue (Ranfurly Way) form part of one of the key entry/ exit routes for the City of Mildura.
- The majority of the study area has no formal road network but includes a series of access ways and informal tracks.
- It has been identified that the intersection of Riverside Avenue and Eleventh Street is problematic and intersection enhancements should be considered.
- A number of current and former road reserves can be seen in the area, most notably Fourteenth Street, the extension of Thirteenth Street and two further reserves which ran through the golf course and landfill areas.
- The study area contains two controlled intersections, at the junction of Riverside Avenue and Eleventh Street and Flora Avenue and Eleventh Street, both of which have roundabouts.
- Access to the Old Aerodrome Recreational Reserve is via three access points. The first
 of these is a through road which runs from Flora Avenue around the baseball and
 athletics fields to Eleventh Avenue, and the second, which is a dead end, is accessed
 from Flora Avenue, provides access to the playground and other facilities
- The Golf Club is accessed via a private road from Twelfth Street.
- A number of bus lines service the area, including inter-town buses which run along Eleventh Street and Flora Avenue.
- Traffic congestion occurs along Eleventh Street, particularly on Saturday mornings when many of the facilities at the recreational reserve are being utilised. This congestion may also result from large amounts of through traffic utilising the roads within the study area.
- There are also concerns regarding potential conflict between pedestrians and traffic, most specifically in relation to students crossing Eleventh Street.

figure 5; access and movement

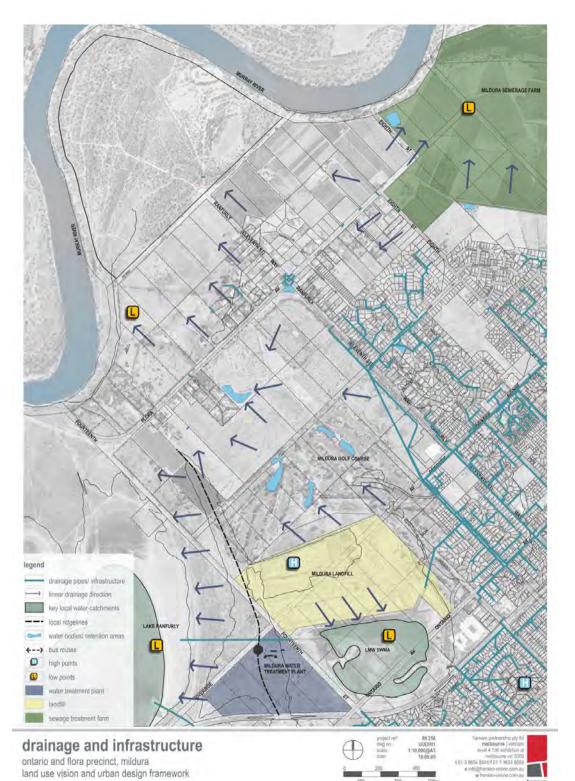


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4.2 landscape and environment

- The precinct contains large area of open space, comprising primarily of land used for agricultural purposes, the recreational reserve and the golf club.
- Uses and current zoning of land parcels (including the Urban Flood Zone) mean that the area is likely to retain a significant, open landscape character into the future.
- Existing canopy vegetation is located primarily within the golf club precinct and in the western corner of the study area, one of the entrance points to Mildura.
- The precinct also contains scattered vegetation within some of the low density residential development, most noticeably in the Hood Court subdivision. A perimeter of trees has also been established around the recreation reserve.
- The Mildura landfill represents the highest point of the area, with land falling away towards the Murray River, Lake Ranfurly and the Bob Courbold Wetland.
- This height of the landfill is expected to be significant towards the end of its capacity, reaching heights comparable to the existing central watertower and it is expected that this land will eventually be converted into further areas of public open space.
- The riverine environment, Lake Ranfurly and the wetlands all provide significant habitat for flora and fauna, with Lake Ranfurly being recognised as playing an important role in the migratory patterns of birds. The hooded scaly-foot, a critically threatened species within Victoria has been found in the area.

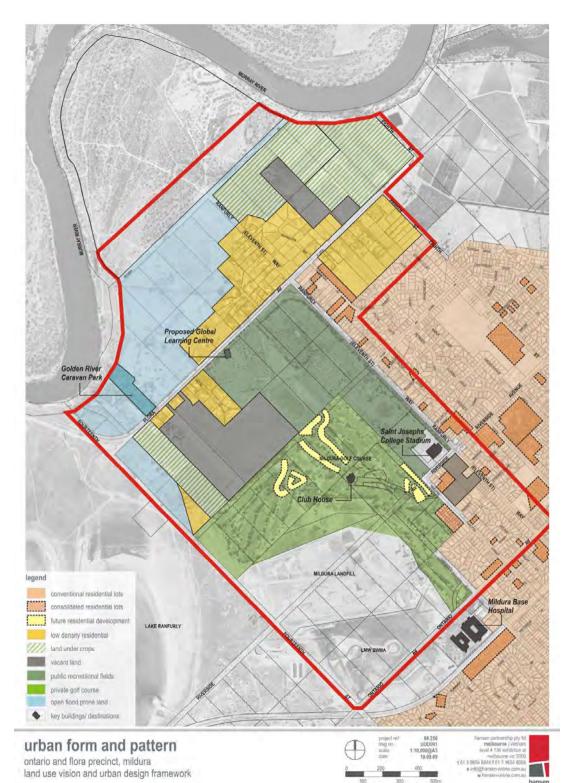
figure 6; landscape and environment



4.3 infrastructure provisions

- Conventional stormwater infrastructure is present in the west and north-west of the study area, including the Ularara Estate.
- Isolated parcels of stormwater infrastructure also exist in the other portions of the study area, primarily in the form of pumps.
- A number of drainage basins have been constructed within the precinct, with those within the golf course forming attractive lakes.
- The topography of the land and the curve of the Murray Rivers course in the vicinity mean that there is not a uniform drainage pattern within the study area, although water does tend to drain towards the lower points of the Murray River and Lake Ranfurly.
- A large water recycling plant is located in the southernmost portion of the study area, adjacent to the landfill site.
- A sewerage farm is located to the north east of the precinct.

figure 7; infrastructure provision



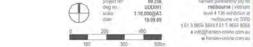
4.4 urban form

- The majority of land in the precinct is occupied by the recreation reserve and golf club which both contain scattered single and double storey buildings associated with their use, such as clubhouses and toilet blocks.
- The golf club contains a two storey club house with associated single storey motel buildings located centrally.
- To the immediate south of the recreation reserve is the large indoor stadium of St Josephs Collage which is approximately three storeys in height and surrounded by atgrade car parking.
- Residential development in the precinct is generally of a one and two storey form at conventional densities. The style of buildings varies between historical reproduction and more contemporary styles.
- The precinct also contains pockets of more intensive development, such as Leicester Street and Twelfth Avenue.
- Buildings within the low density residential areas tend to be of a sprawling, single storey form.
- There are a number of dwellings around the edge of the golf course which have been orientated to open up to this space and to borrow the amenity of this facility.
- Some sections of the study area continue to be under crop, primarily to the north, adjoining the river, but also a smaller parcel immediately north of the golf club.
- The study area also contains a number of parcels of vacant land.

figure 8; urban form



opportunities ontario and flora precinct, mildura land use vision and urban design framework



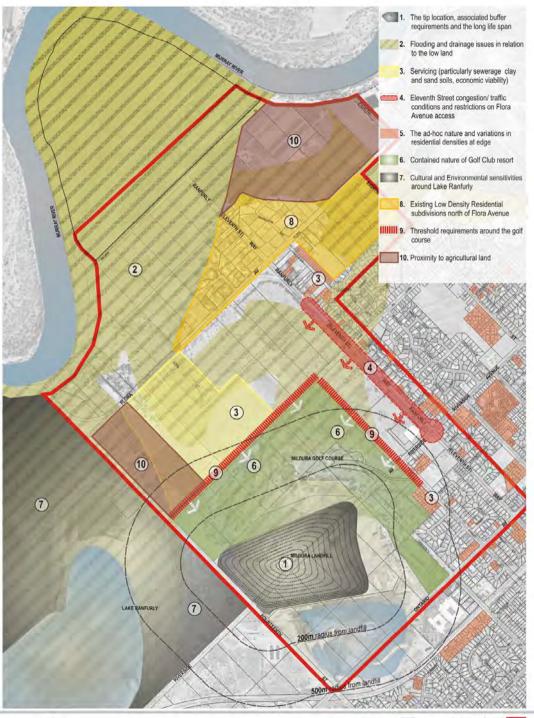
5 opportunities and constraints

Upon confirmation of the analysis above, the following 'opportunities and constraints' were highlighted in consultation with landowners, community and stakeholders. The plan besides illustrates a summary of the analysis with the opportunities and constraints of the development area identified:

PRECINCT OPPORTUNITIES

- 1. The position of the precinct as Mildura's north-west gateway
- 2. The quality and extent of existing recreational assets
- 3. The high-end Golf Club "resort" image
- 4. Existing medium density housing at the Golf Club edges
- 5. Proximity to the CBD and other key facilities (i.e. the hospital)
- 6. Enticing nature of the West Mildura residential area
- 7. The potential for improved access to the recreation reserve and Lake Ranfurly
- 8. A more definitive urban edge
- 9. The area's proximity and access to the Murray River
- 10. The future expansion of the Recreation Reserve and the addition of more 'green' space

figure 9; opportunities

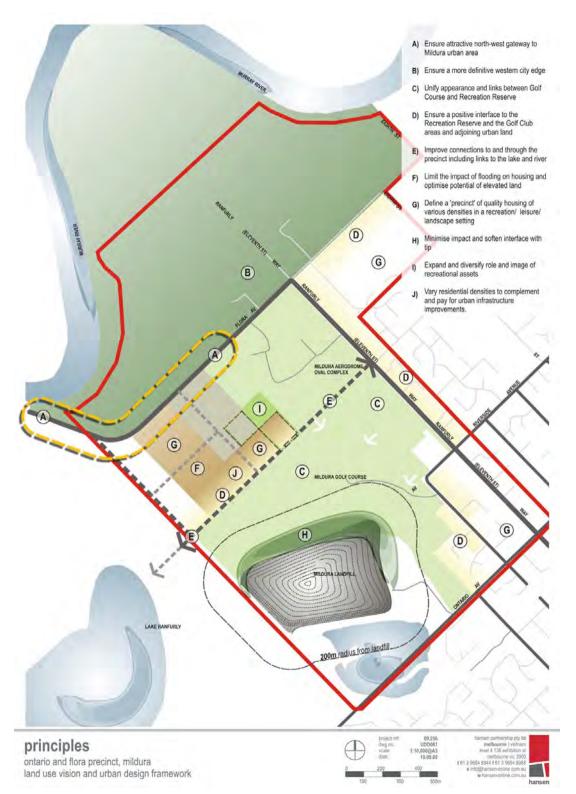


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PRECINCT CONSTRAINTS

- 1. The tip location and associated buffer requirements and the long life span
- 2. Flooding and drainage issues in relation to the low land
- 3. Servicing (particularly sewerage clay and sand soils, economic viability)
- 4. Eleventh Street congestion/ traffic conditions and restrictions on Flora Avenue access
- 5. The ad-hoc nature and variations in residential densities at edge
- 6. Contained nature of Golf Club resort
- 7. Cultural and Environmental sensitivities around Lake Ranfurly
- 8. Existing Low Density Residential subdivisions north of Flora Avenue
- 9. Threshold requirements around the golf course
- 10. Proximity to agricultural land

figure 10; constraint



6 preliminary recommendations

In conclusion, this analysis and assessment report has identified the following:

- Inappropriate zoning exists within and around the Study Area, particularly the Public Parks and Recreation Zoning of the St. Joseph's indoor sporting facility and the Golf Club Resort.
- The north-western gateway to Mildura is insufficiently defined.
- There are poor connections between the residential areas of Mildura and Lake Ranfurly and the Murray River.
- Access and pedestrian safety appear to be an issue, particularly along Eleventh Street.
- There are highly attractive landscape characteristics within the area which mean demand for dwellings in the area is likely to be reasonably high.
- Most lots within the study area appear to have been developed, with the exception of the vacant parcel to the immediate north of the golf course, known as the 'Barker' land.
- Flooding issues will strongly influence development potential of land within the study area.

From this, a number of principles for development in the area have been identified, as follows:

a) Ensure attractive north-west gateway to Mildura urban area.

b) Ensure a more definitive western city edge.

c) Unify appearance and links between Golf Course and Recreation Reserve.

d) Ensure a positive interface to the Recreation Reserve and the Golf Club areas and adjoining urban land.

e) Improve connections to and through the precinct including links to the lake and river.

f) Limit the impact of flooding on housing and optimise potential of elevated land.

g) Define a 'precinct' of quality housing of various densities in a recreation/ leisure/ landscape setting.

h) Minimise impact and soften interface with landfill.

i) Expand and diversify role and image of recreational assets.

j) Vary residential densities to complement and pay for urban infrastructure improvements.

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appendix 2 response to submissions

response to submissions feedback from community and key stakeholders following public exhibition of draft documentation

#	feedback	response
1	Concerned with the addition of a road extension from Twelfth Street which compromises the current location of the Radio Control Car Club.	The extension of Twelfth Street has been included as requested by Council to provide improved access t associated with the southern ovals in the Old Aerodrome Recreation Reserve.
	Concerned that the plan is at odds with the permanent tenure granted by Council. Concern over reference within the background analysis to the inappropriateness of the co- location of approved residential development and the car club.	The granting of permanent tenure by Council is not considered to affect the strategic and statutory considered appropriateness of this location for the car club.
		The comment within the background report states:
		"There is some suggestion that the model car racing group which currently uses the area adjoining St Jo granted a permanent home in this position. This is not considered an appropriate location for nitro power approved residential subdivision immediately adjoining this land. "
		While it is acknowledged that the comment in the background report should not be included under the sp masterplan section, the comment remains valid. Given Council has approved residential development im this site, the site can no longer be considered to be the most appropriate location for the car club from a sperspective.
		It is recommended that some change be made to the report to indicate an alternative location for this car be more suitably co-located with existing racing activities north of the Study Area.
2	Requested that should the RCZ be pursued for land to the north-west of Flora Avenue, that subdivision size for those areas should be 1 hectare, with a maximum of 3 hectares and an average of 1.5 hectares.	The purpose of the RCZ is to ensure that the conservation values of an area are primary. The parcels of are in close proximity to the Murray River, as reflected by the ESO which currently affect the land. The R considered to be a residential zone and, as such, applying a subdivision size which is less than the adjoint considered to be a residential zone and as such applying a subdivision size which is less than the adjoint considered to be a residential zone and as such applying a subdivision size which is less than the adjoint considered to be a residential zone and as such applying a subdivision size which is less than the adjoint considered to be a residential zone and as such applying a subdivision size which is less than the adjoint considered to be a residential zone and as such applying a subdivision size which is less than the adjoint considered to be a residential zone and as such applying a subdivision size which is less than the adjoint considered to be a residential zone and as such applying a subdivision size which is less than the adjoint considered to be a residential zone and as such applying a subdivision size which is less than the adjoint considered to be a residential zone and as such applying a subdivision size which is less than the adjoint considered to be a residential zone and as such applying a subdivision size which is less than the adjoint constraint applying a subdivision size which is less than the adjoint constraint applying a subdivision size which is less than the adjoint constraint applying a subdivision size which is less than the adjoint constraint applying a subdivision size which is less than the adjoint constraint applying a subdivision size which is less than the adjoint constraint applying a subdivision size which is less than the adjoint constraint applying a subdivision size which is less than the adjoint constraint applying a subdivision size which is less than the adjoint constraint applying a subdivision size which applying a subdivision size which applying a subdiv
	As an alternative, it was suggested that the land not located in the floodway zone be rezoned to LDRZ.	considered contrary to the intent of the plan to provide a transition. Rezoning the land to LDRZ is also considered contrary to the plan, particularly given the low density residence been identified within Council decuments.
		have been identified within Council documents. <i>No change recommended to the report.</i>
3	Fourteenth Street extension is recommended for inclusion	The extension of Fourteenth Street is recommended for further investigation due to a number of associat section 8.2.1 for more details.
	Planning should include a link with the river cycling/ walking paths Plan to retain area as 'public open space', with public uses allowed with no barriers and consolidation of buildings within the sporting precinct.	Links with the river tracks have been included on the plan.
		Issues relating to the internal arrangements and management of the Old Aerodrome Recreation Reserve addressed in the recently prepared masterplan for the area.
		No change recommended to the report.
4	Expresses support for the plan, in particular the revitalisation of the northern portion of Lake Ranfurly.	No change recommended to the report.
	Indicates a willingness to work with Council in providing bird hides and information displays for any new wetland development.	
5	Concern over lack of consultation during this process and the granting of a permit for the	Key stakeholders were identified by Council at the beginning of this process and invited to attend the rele

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t Josephs facility be wered cars, given the

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car club, which may

of land in question RC zoning is not djoining LDRZ land is

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relevant consultation

response to submissions

feedback from community and key stakeholders following public exhibition of draft documentation

#	feedback	response	
	adjoining golf club development. Concern that the plan is at odds with the endorsed recommendation, as follows: 'the Remote Control Car Club should be provided with a long term occupancy agreement for the area it occupies in the field behind St Joseph College Stadium subject to a Town Planning Permit being obtained by the club and if this is not approved, an alternative location be provided for the club.'	sessions. While this did not include the RC car club, it is understood this was due to the recommendation This recommendation was considered and acknowledged as part of this process. However, it was detern the permit which had been issued subsequent to this recommendation that allowed for sensitive resident the site, it was unlikely that Council would issue a permit for the existing site.	
		As a consequence, it was considered that the RC Car Club should be provided with an alternative site. We explicitly stated, it was thought that a location in proximity to the existing racing operations to the north of would be more suitable to the on-going development of this important recreational activity.	
		It is recommended that some change be made to the report to indicate an alternative location for this car be more suitably co-located with existing racing activities north of the Study Area.	
6	Concern over the possible difficulty with traffic utilising the extension to Twelfth Street should no treatments to the Eleventh/ Riverside or Twelfth/Ontario intersections be included.	The plan includes the signalisation of the Eleventh/Riverside intersection which should address these condetailed design will be required as implementation of the plan proceeds.	
		No change recommended to the report.	
7	Numerous Issues.	Submitter has requested that we respond only to formal submission lodged on their behalf by Bill Nicols	
		No change recommended to the report.	
8	At the request of a public member the CMA indicated that, while flooding could be expected to reach depths of 1m, they would not object to development at higher densities should the land be filled to their specifications.	While it is acknowledged that land can be filled to address issues associated with flooding, in general this planning practise. The filling of one area can have unintended consequence for other areas. It is conside particularly given the sensitive environmental surrounds to recommend such extensive filling of the land a process.	
	They also recommended that the level of Flora Avenue be raised to a similar level.	process. Further to this it is considered that raising the level of Flora Avenue is not warranted as there would be no benefit. As such, any raising of Flora Avenue would have to be at the expense of the landowner and wou carried out in consultation and with the support of VicRoads, who are the relevant authority.	
		We have advised the relevant landowner that, should fully documented and supported evidence be provi of the level of this land will have no adverse drainage or flooding consequences, then changes to the rep considered.	
9	Supportive of the overall document.	The extension of Twelfth Street has been included as requested by Council to provide improve	
	Does not consider that the extension of Twelfth Street is necessary.	associated with the southern ovals in the Old Aerodrome Recreation Reserve.	
	Supports the application of a Comprehensive Development Zone over the Mildura Golf Club	The requested flexibility is a matter to be resolved by Council when the amendment documentation is be However, it is noted that no issue is found with any of the requested flexibility documented in this submis	
	Submitter seeks some flexibility to the CDZ as follows:	No change recommended to the report.	
	 ability to make appropriate changes to the size of the housing lots within the approved nodes 		
	 retention of the opportunity to subdivide the existing motel/apartment complex and to possibly incorporate other uses such as function facilities 		
	 'Area C' which is Council owned but subject to a valid lease should be included as part of the CDZ. 		

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being prepared. hission.

response to submissions

feedback from community and key stakeholders following public exhibition of draft documentation

#	feedback	response
10	Traffic from the Golf Club development will impact on Eleventh Street in addition to existing traffic congestion; therefore Fourteenth Street extension should be a priority.	The extension of Fourteenth Street is recommended for further investigation due to a number of associa section 8.2.1 for more details.
		No change recommended to the report.
11	Are generally supportive of the vision for the precinct with some notable exceptions, detailed further below.	a . The 'intensity' of development refers to the number of lots, and therefore dwellings within a certain are aside from scale and form, as it will exert a strong influence on the appearance of an area.
	a. Considers that the 'intensity' of development is irrelevant if scale and form are appropriate.	b. Previous adopted studies have identified that a further parcel of land is required to accommodate the
	b. Objects to the application of a PPRZ to privately owned land adjacent to the Old Aerodrome Ovals. Feels the application of a PAO is premature due to ongoing negotiations and that, given the land cannot be rezoned to public land until it is publicly owned, the suggestions for PPRZ is objectionable.	of the Mildura community. While it is acknowledged that negotiations with the relevant landowner are on represents a framework for the future development of the Ontario-Flora Precinct. While it is understood t configuration of land would be preferred by the landowner, this framework identifies land for Council to a to the needs identified by Council in terms of recreational assets (for the whole of the Mildura community acknowledged that the landowner may choose not to sell this land in the immediate future, the land is or
	c. Objects to the proposed setback between the golf club and any future residential development adjoining the land. Feels that the onus should be on the golf club and not on any future residential development to protect that land for the impacts of golf balls.	long term. As such, the application of the PAO is appropriate. While the submission is correct in that the rezoning to PPRZ can only occur once Council has acquired to apply appropriate processing to a particular the local term.
	d . Requests that the first funding available for road works be used to raise the level of Flora Avenue to protect the area from flooding.	only rezoning recommended for the parcel affected by the PAO. To rezone the land to R1Z, when the lo intent is to acquire the land for public uses may well result in the land being developed with housing, the acquisition of the land for the Mildura community.
	Feels that flooding and drainage issues have been confused in the area. Feels that, as the Mallee CMA has advised that the land can be filled to accommodate higher density residential development, the application of an LSIO to this land is redundant.	c. The separations shown between the recommended R1Z land and the Mildura Golf Club is considered land is required to accommodate both pedestrian and cycling tracks and a vehicular accessway. Further that, as the Golf Club is an existing use, the onus is on any future development to respond appropriately
	Feels that, given only a 300m section of Flora Avenue is below the flood level, and the CMA advice received, that flooding and drainage are no longer relevant factors in determining the future of that land.	conditions. The measures proposed have been based on known parameters.d. While flooding and drainage have been dealt with together in this report, to clarify, flooding is reflective. Murray River may rise and spill over and affect the land and is denoted by the existing LSIO. The draina
	e. There is some suggestion that the drainage basin should be shared between developments and not borne entirely by on landowner.	the gathering of stormwater within the affected land as a result of the prevailing topography. Floodwretained in this area.
	f. Objects strongly to the application of LDRZ to a portion of the land as it is considered unviable due to lack of demand, cost of servicing, there will be additional lots of similar sizes coming onto the market and previous panels have questioned the logic of the 0.4h minimum.	As discussed above, while it is acknowledged that land can be filled to address issues associated with fl this is not good planning practise. The filling of one area can have unintended consequence for other are inappropriate, particularly given the sensitive environmental surrounds to recommend such extensive fill part of this process.
	They request entire parcel of land be rezoned to R1Z with appropriate schedules.	Further, it is considered that raising the level of Flora Avenue is not warranted as there would be no net
	Agrees the precinct should be positioned as a 'green' precinct which links the natural features of the area with new technologies for sustainable living.	As such, any raising of Flora Avenue would have to be at the expense of the landowner and would need consultation and with the support of VicRoads, who are the relevant authority.
	Supports the denotation of Flora Avenue as the logical transition point between urban and rural land	e. The drainage basin has been located at the lowest point in the locality, however, the development of a the area can assess the most appropriate drainage requirements at that time. This should be determined
	Supports the application of a CDZ to the Mildura Golf Club	drainage experts. The development of a wetland to the northern edge of Lake Ranfurly may offer some a innovative options for the capture, release or treatment of stormwater.
	g. Feels there was inadequate consultation and would like the opportunity to respond further to the issues raised within this report.	
	·	f. Without addressing the flooding and drainage issues which affect this land it is considered inappropria that these parcels be developed at a higher density than those identified under the LDRZ.

ciated issues, see

area. This is relevant,

he recreational needs on-going, this plan od that a different o acquire corresponds nity). While it is only required in the

ed the land, this is the long term strategic hereby precluding the

red appropriate. This nermore it is noted ely to these

tive of where the nage issues related to er would also be

h flooding, in general areas. It is considered filling of the land as

et community benefit. ed to be carried out in

of any future DPO for ned by the appropriate ne additional,

riate to recommend

response to submissions

feedback from community and key stakeholders following public exhibition of draft documentation

feedback	response
	Further, it is noted that not all non-flood affected land has been recommended for rezoning to R1Z. Strate provided only for that land which is in closer proximity to the open spaces of the Golf Club and Old Aeroda Reserve. As such it is noted that the adjoining land to the SW, which is elevated and not affected by any f drainage constraints is not recommended for rezoning either.
	g. Consultation was undertaken at Council's request and this exhibition period offers an opportunity to for the issues raised in the report. It is also noted that a number of private meetings have been held at the cowhereby the landowner has put forward her views on the issues.
	We have advised the relevant landowner that, should fully documented and supported evidence be provid of the level of this land will have no adverse consequences, then changes to the report may be considere
	No other changes are recommended to the report.
Concerned with the additional of a road extension from Twelfth Street which compromises the current location of the Radio Control Car Club.	The extension of Twelfth Street has been included as requested by Council to provide improved access to associated with the southern ovals in the Old Aerodrome Recreation Reserve.
	Given Council has approved residential development immediately abutting this site, the site can no longer be the most appropriate location for the car club from a strategic planning perspective.
	It is recommended that some change be made to the report to indicate an alternative location for this car be more suitably co-located with existing racing activities north of the Study Area.
	Concerned with the additional of a road extension from Twelfth Street which compromises the

rategic justification is rodrome Recreational ny flooding or

formally respond to consultants offices

ovided that the raising lered.

s to the car parks

iger be considered to

car club, which may



appendix 3 MCMA correspondence Application No (CMA Ref):F-2010-0020Document No:1OC No:2009537Council No:Ontario-Flora Precinct PlanOther No:SLP01GDate:6 April 2010

Peter Douglas Manager Development Services Mildura Rural City Council PO Box 105 MILDURA VIC 3502

Dear Peter,

Regarding:

Ontario-Flora Precinct Plan

Thank you for the opportunity for the Mallee Catchment Management Authority (CMA) to provide further comment on the above plan. The authority acknowledges that it was consulted early in the process of developing the draft plan and has provided advice during this process which has been reflected well within the draft plan. However, at the request of a public member, further advice has been sought with regard to land on the south eastern side of Flora Avenue, more specifically, the approved 33 Lot Low Density Residential subdivision off Flora Avenue. Following further discussions with the Department of Sustainability and Environment's Floodplain Management Unit in Melbourne, the authority provides the following comments with regard to flooding issues.

General Comments:

The authority has no issues with land fill on the aerodrome ovals side of Flora Avenue between the high land opposite Golden River Holiday Resort and Eighth Street.

Specific Comments:

Section 5.4 There is a dot point there which states,

"While it is noted that smaller lots were possible, recent indications from the CMA are that the land in the northern area affected by the LSIO may be more severely affected by flooding than was previously felt. As such, this LDRZ land has been kept at a minimum lot size of 0.4h."

Whilst the Mallee CMA still acknowledges that this land has areas that would indicate flooding in a 100 year ARI event to depths up to 1 metre, the CMA would not object to higher density residential lots providing the following conditions were met:

- 1. Land must be filled to the 1% flood level;
- 2. All access roads must be filled to the 1% flood level; and
- 3. All dwellings are set at least 300 millimetres above the 1% flood level.

It should also be noted that it would be ideal for Flora Avenue to be raised to the 1% flood level.

F-2010-0020-01.doc

Should you have any further queries, please do not hesitate to Darren Wilson on (03) 5051 4360. To assist the CMA in handling any enquiries please quote **F-2010-0020** in your correspondence with us.

Yours sincerely,

Linda Pratt Acting Chief Executive Officer

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

F-2010-0020-01.doc

Definitions and Disclaimers

- The area referred to in this letter as the 'proposed development location' is the land parcel(s) that, according to the Authority's
 assessment, most closely represent(s) the location identified by the applicant. The identification of the 'proposed development
 location' on the Authority's GIS has been done in good faith and in accordance with the information given to the Authority by the
 applicant(s) and/or Mildura Rural City Council.
- 2. While every endeavour has been made by the Authority to identify the proposed development location on its GIS using VicMap Parcel, Address and Planning datasets supplied by Department of Sustainability and Environment (DSE), the Authority accepts no responsibility for or makes no warranty with regard to the accuracy or naming of this proposed development location according to its official land title description.
- AEP as Annual Exceedence Probability is the likelihood of occurrence of a flood of given size or larger occurring in any one year. AEP is expressed as a percentage (%) risk and may be expressed as the reciprocal of ARI (Average Recurrence Interval).

Please note that the 1% probability flood is not the probable maximum flood (PMF). There is always a possibility that a flood larger in height and extent than the 1% probability flood may occur in the future.

- 4. ARI as Average Recurrence Interval is the likelihood of occurrence, expressed in terms of the long-term average number of years, between flood events as large as or larger than the design flood event. For example, floods with a discharge as large as or larger than the 100 year ARI flood will occur on average once every 100 years.
- 5. AHD as Australian Height Datum is the adopted national height datum that generally relates to height above mean sea level. Elevation is in metres.
- 6. NPL as Nominal Protection Level is the 100-year ARI flood level plus a freeboard margin of 300mm.
- 7. No warranty is made as to the accuracy or liability of any flood maps, height datum or levels, studies, estimates, calculations, opinions, conclusions, recommendations (which may change without notice) or other information contained in this letter and, to the maximum extent permitted by law, the Authority disclaims all liability and responsibility for any direct or indirect loss or damage which may be suffered by any recipient or other person through relying on anything contained in or omitted from this letter.
- 8. This letter has been prepared for the sole use by the party to whom it is addressed and no responsibility is accepted by the Authority with regard to any third party use of the whole or of any part of its contents. Neither the whole nor any part of this letter or any reference thereto may be included in any document, circular or statement without the Authority's written approval of the form and context in which it would appear.
 - 9. The flood information provided represents the best estimates based on currently available information. This information is subject to change as new information becomes available and as further studies are carried out.

P 1/6/10 WEN

CMA Ref: Document No: OC No: Other No: Date: F-2010-0036 1 2009656 SLP03A 3 June 2010

Bill Nichol Director Nicol Projects 15 The Grange Mildura, VIC 3500

ma//ee

Dear Bill,

Location	Street: Cadastral:	Flora Avenue Lot 1, LP94487, Parish of Mildura
Regarding:		Flood Advice

Thank you for your email enquiry received at the Mallee Catchment Management Authority (CMA) on 1 June 2010 with regard to the above land..

Flood levels for the 1% AEP probability (100 year ARI) have been declared for this area under the Water Act 1989. The declared 1% flood level for the location described above is 38.15 metres AHD, which was obtained from the Victorian Flood Database. Consequently the Authority advises that in the event of a 100 year ARI flood it is likely that the north-western corner of the location would be subject to inundation from the Murray River.

In light of the above information, the Mallee CMA would not abject to the small area of Lot 1, LP94487, currently within the Urban Floodway zone being rezoned to the proposed Residential 1 Zone. However, the following conditions would apply:

- 1. Land must be filled to the 1% flood level;
- 2. All access roads must be filled to the 1% flood level; and
- 3. All dwellings are set at least 300 millimetres above the 1% flood level.

Please note, this document contains flood level <u>advice only</u> and does not constitute approval or otherwise of any development at this location.

Should you have any further queries, please do not hesitate to me on (03) 5051 4360. To assist the CMA in handling any enquiries please quote **F-2010-0036** in your correspondence with us.

Yours sincerely,

Khi -

Darren Wilson Rivers and Wetlands Coordinator

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

F-2010-0036-01.doc

Pg1of2

Definitions and Disclaimers

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- AEP as Annual Exceedence Probability is the likelihood of occurrence of a flood of given size or larger occurring in any one year. AEP is expressed as a percentage (%) risk and may be expressed as the reciprocal of ARI (Average Recurrence Interval).

Please note that the 1% probability flood is not the probable maximum flood (PMF). There is always a possibility that a flood larger in height and extent than the 1% probability flood may occur in the future.

- 4. ARI as Average Recurrence interval is the likelihood of occurrence, expressed in terms of the long-term average number of years, between flood events as large as or larger than the design flood event. For example, floods with a discharge as large as or larger than the 100 year ARI flood will occur on average once every 100 years.
- AHD as Australian Height Datum is the adopted national height datum that generally relates to height above mean sea level. Elevation is in metres.
- 6. NPL as Nominal Protection Level is the 100-year ARI flood level plus a freeboard margin of 300mm.
- 7. No warranty is made as to the accuracy or liability of any flood maps, height datum or levels, studies, estimates, calculations, opinions, conclusions, recommendations (which may change without notice) or other information contained in this letter and, to the maximum extent permitted by law, the Authority disclaims all liability and responsibility for any direct or indirect loss or damage which may be suffered by any recipient or other person through relying on anything contained in or omitted from this letter.
- 8. This letter has been prepared for the sole use by the party to whom it is addressed and no responsibility is accepted by the Authority with regard to any third party use of the whole or of any part of its contents. Neither the whole nor any part of this letter or any reference thereto may be included in any document, circular or statement without the Authority's written approval of the form and context in which it would appear.
- 9. The flood information provided represents the best estimates based on currently available information. This information is subject to change as new information becomes available and as further studies are carried out.

