#### SHIRE OF DENMARK

#### HORSLEY/ROCKFORD ROAD LOCAL STRUCTURE PLAN







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#### INTRODUCTION

#### 1.1 Project Area

The project area comprises the following lots:

50	Scotsdale Road	1.0274ha	
51	Scotsdale Road	5.1287ha	
365	Scotsdale Road	7.4216ha	
366	Horsley Road	7.1746ha	
372	Horsley Road	8.4073ha	
	Total	29.1596ha	

Lot sizes and dimensions have been sourced from the latest available public plans.

The general location is depicted on the following location plan.

#### 1.2 Purpose

The purpose of the Local Structure Plan (LSP) is to outline how the development of the lots for residential purposes can proceed to provide a coordinated and quality residential area.

#### 1.3 Objective

The objective of the Local Structure Plan is to provide for the logical development of the individual land parcels with a plan that will see development appropriately serviced and coordinated in terms of road connections, public open space, drainage and the like.

#### 1.4 Location

The project area forms a significant area to the north of Denmark's existing urban area and is identified by the Shire of Denmark Settlement Strategy as Planning Unit A; a significant urban expansion area necessary for the continued planned growth of the Denmark Townsite. It is also recognised as such in Council's Draft Local Planning Strategy.

#### 1.5 Major Issues

The major issues and opportunities with the planning unit are:

- Gentle eastern slope providing for excellent aspect, views and orientation to the morning sun.

- Mostly cleared grazing land providing for subdivision and development without impacting on significant remnant vegetation.
- Incompatible vineyard land use on Lot 51 has been discontinued.
- Stable landform providing a good base for development.
- Good access options through Rockford and Horsley Roads.
- Northern portions or Horsley and McLean Roads comprised by remnant vegetation and Scotsdale Road compromised by access and safety issues.
- Urban services readily available or can be extended to service the site.
- The general easterly fall and central drainage line provide options for effective onsite drainage management and Public Open Space (POS) provision.
- Few relatively large landholdings provide for options for independent development.
- Close to the Denmark town centre and its human and social services providing a logical area for urban expansion.

#### 1.6 Background Planning

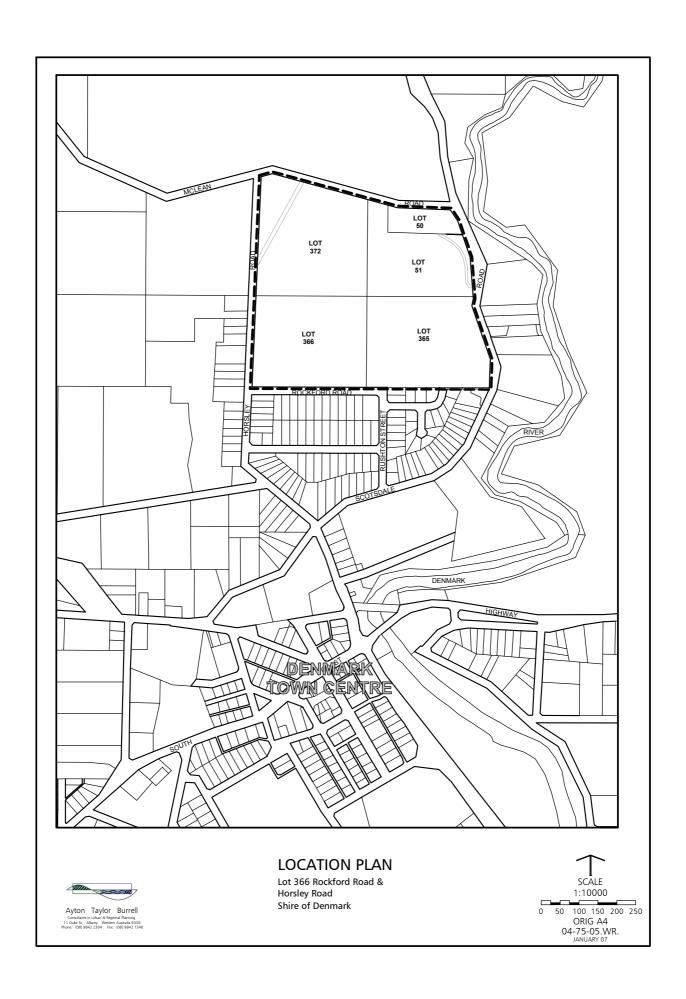
The 1994 Albany Regional Strategy outlined the regional planning framework within which Council was to develop its own residential strategies.

The Albany Regional Strategy identifies the following objectives and key actions relevant to Councils Residential Strategy and this Local Structure Plan.

Albany Regional Strategy Objective

- To encourage frontal development/growth.
- To provide security/stability in the residential land market through the provision of sufficient land.
- To promote urban consolidation, choice and affordability, and to encourage diversification of housing stock in a manner which recognises the importance of heritage values to the amenity and identity of the region.

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#### Project Area



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Albany Regional Strategy Key Actions

- Develop a strategy which will promote the efficient provision of infrastructure aimed at encouraging the development of both existing and future residential areas.
- Town planning schemes should include housing strategies which provide opportunities for urban consolidation, choice and variety in housing style together with energy efficient housing and subdivision design.
- Residential subdivision in the towns should be promoted on existing zoned land with future rezoning being considered in line with need and established planning criteria such as the orderly extension of services, access to community facilities and the avoidance of land with impediments.
- Ensure there is a sufficient supply of vacant zoned and serviced residential land to cater for demand for a two to three year period at any one time.

Under the Albany Regional Strategy and these objectives and actions, the Shire of Denmark prepared and adopted, as a town planning policy, the Settlement Strategy for Denmark.

This is a detailed strategy framed to provide for the residential growth needs of Denmark by identifying the objectives and needs for urban growth for the Denmark townsite.

To this end, the settlement strategy identifies a number of precincts capable of accommodating the future growth needs and also identifies the characteristics and preferred density of development.

The subject land is identified as one of Denmark's principal urban expansion areas noted as Planning Unit A.

In the late 1990's, a Draft Structure Plan was prepared for the subject land by Master Plan Consultants. This plan was conditionally supported by Council in December 1999 for advertising on the condition modifications were undertaken. This plan has stalled at this point in the process. The modifications have not been completed by the proponent or submitted to Council since this date.

The Western Australian Planning Commission has just released the Lower Great Southern Strategy which will replace the Albany Regional Strategy in terms of region wide strategic guidance. Similar to the ARS, this study supports planned expansion and consolidation of the Denmark townsite. The LGSS also argues for the protection of significant remnant vegetation, provision of high amenity neighbourhoods, a mix of lot sizes and housing options and the efficient use of valuable serviced townsite land.

Council's Draft Local Planning Strategy, which has been recently advertised for comment, identifies this area for urban growth based on the recommendation of the current Settlement Strategy.

#### 2.0 PLANNING CONTEXT

### 2.1 Shire of Denmark Settlement Strategy & Local Planning Strategy (see Appendix A)

The requirements for Planning Unit A follow. In summary, these strategies makes it clear that this area needs structure planning prior to becoming an important urban expansion area within the existing urban fabric. Other issues include:

- Need for restricted access to Scotsdale Road.
- Minor sewer extension works may be required for portions of the area.
- Water and electrical services are readily available.
- The central drainage line focuses stormwater management options and provides for coordinated POS provision.
- Excellent views available from the site although visual impact does need consideration within the context of providing for efficient development and attractive home sites.
- Opportunities to protect remnant vegetation within POS.
- Need to investigate demand for commercial/community facilities.

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## 2.2 1999 Draft Local Structure Plan (see Appendix B)

In 1999, a draft Local Structure Plan was completed for the land. This plan was initially adopted by Council subject to a range of modifications being completed before referral to the Western Australian Planning Commission for advertising approval however processing stalled when the modifications were not carried out. As a result, the plan has not been finalised or endorsed by Council, the land owners or the Western Australian Planning Commission.

Even so, the draft plan and the modification required by Council can inform the current plan and provide guidance on some of the specific development issues considered important by council.

#### These include:

- Modified and deformed grid road layout to maximise permeability and accessibility.
- Construction of Rushton Street through the site to the north.
- Access restrictions to Scotsdale Road for safety and landscape protection purposes.
- Access restrictions to northern portion of Horsley Road and the unconstructed sections of McLean Road so as to protect the significant remnant vegetation.
- Central POS on drainage line to provide site feature and coordinated drainage function.
- Use of modified subdivision layout to account for the water main located in the north west of Lot 372.
- Discontinuation of Powley Street at the remnant vegetation on Lot 365.
- Subdivisional need for design guidelines for any grouped dwelling sites abutting areas of POS so as to ensure future development of these sites complement the POS and to meet Western Australian Planning Commission Draft Policy – Designing Out Crime

- Need for subdivisional provision of themed open style and visually permeable fencing to lot boundaries shared with POS and boundaries to Scotsdale Road.
- Indicating a suitable pedestrian movement network as well as a suitable road hierarchy.
- Subdivision design to enable solar orientation for energy efficient housing.

## 2.3 Shire of Denmark Traffic Study 2005 (see Appendix C)

The purpose of this study is to identify the preferred road hierarchy for the existing urban area and identify proposals for land identified for short term urban expansion. Also included is the strategic dual use path/footpath network.

With regards the subject land, the traffic study proposes:

- The extension of Rushton Street to the north through the site as an urban access street.
- The termination of Horsley Road at the significant tree cover adjacent to Lot 372
- Horsley Road to terminate as an urban distributor at two urban access streets linking further north through the adjoining lots.
- Northern sections of Horsley Road to remain unconstructed as POS to protect remnant tree cover.
- McLean Road to remain unconstructed to protect tree cover or be augmented from adjoining lots so that tree cover can be protected whilst an access place is constructed.
- Direct lot and subdivisional access to Scotsdale Road be limited.

Even with these measures and based on the subject and immediately surrounding land being fully developed, Horsley Road (as the main distributor to the town centre) will remain a local scale road.

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#### 3.0 THE STUDY AREA

#### 3.1 Vegetation and Site Development

The subject lots are almost totally cleared accommodating developed pasture supporting an historic grazing use.

There is a copse of remnant vegetation situated on Lot 365 occupying some 3000m2 adjacent to the termination of Powley Street.

Portions of Lot 51 previously supported a vineyard however this activity has been discontinued and replaced by grazing/pasture.

With the exception of Lots 50 and 365, all existing lots accommodate a residential dwelling and associated outbuilding/s. Lot 50 has been developed with a single chalet run from the principal dwelling. Lot 365 has two residential dwellings.

A pocket (~1700m2) of remnant vegetation exists toward the south west corner of Lot 372 near the existing residential dwelling.

In summary, subject to planning, design and approval, neither remnant vegetation nor site use/development provides any significant impediment to future use and development of the overall area for residential purposes.

There is no onsite or no adjoining landuses that constrain residential expansion. Adjoining landuses include as residential, grazing and park and recreation type uses.

#### 3.2 Soils and Landform

Landform is generally described as broad crests and flanks with moderate slopes of generally less than 10% down to the east.

This is a stable landform based on weathered granite common in the Denmark area. Care needs to be taken with drainage to minimise water loadings up hill of house sites and with roadways and detailed design of road sub base. These issues have presented in the development of nearby special residential and rural zones where lot and road drainage is not undertaken to the same level as a fully serviced residential area. Given this development will include deep sewerage, lot drainage and a kerbed and piped stormwater drainage system, these issues should not present following development completion and subdivisional works.

Soils are described as duplex accommodating brown gravely surface layers with a yellow/brown and red/brown clay sub soil. A loam texture is present with a 10 – 20% stone content.

Neither native soils or landform create unmanageable site conditions for the development of fully serviced residential lots so log as due process is followed with background, approvals, and subdivision and residential development.

#### 3.3 Landscape and Amenity

The site presents as open grazing land. This will change following development. Although it is impossible to accommodate development and keep this open landscape it is possible to mitigate the effect of a hard developed landscape by ensuring protection of the existing pockets of significant tree cover, by retaining the tree cover within the McLean and Horsley Road reserve and by consolidating Public Open Space provision on other treed areas to create a site feature and to break up development bulk.

The above measures will ensure that the change in landscape will complement the adjoining established residential areas.

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#### SITE CHARACTERISTICS

Lots 50, 51, 365, 366 and 372 Rockford Road, Horsley Road & Scotsdale Road, Shire of Denmark





#### 3.4 Land Ownership

Lot Details are outlined below

Lot 50	1.0274ha	Subject to	
		dealings	
Lot 51	5.1287ha	Subject to	
		dealings	
Lot 365	7.4216ha	GM & JE	
		Dimmock	
Lot 366	7.1746ha	Suburbia	
		Investments Pty	
		Ltd	
Lot 372	8.4073 ha	Melvista Park Pty	
		Ltd	

Note: All areas taken from DLI Public Plans (January 2006).

#### 3.5 Services

Reticulated water is immediately available to southern portions of this land and may be extended to service the site. A supply main crosses the north western corner of Lot 372. Design mechanisms are proposed to incorporate and protect this infrastructure.

Extensions to the existing deep sewer can be made to service the site. These extensions can be made via Rushton Street as well as Scotsdale Road. Given the sites easterly fall an efficient gravity system can be utilised to service the lots.

Electrical services can be extended underground from existing service points within road reserves and other service corridors. Electrical trenching can also be used for communications cabling as well. The existing 66kv transmission line should be protected with an extension to the Rushton Street alignment and subject to Weston Power requirements, will be underground as a component of development.

With the exception of the north west water service and the power transmission line (which both can be accommodated with careful design), the site presents no impediment to the provision of the necessary infrastructure services.

#### 3.6 Site Drainage/Stormwater Management

The bulk of the site drains to the east (mainly via the minor valley on Lot 365) to the Denmark River. A small portion of Lot 372 drains generally to the north west.

The minor valley is an existing site feature that reduces the area available to development on Lot 365. The central valley opens opportunities for designed and landscaped drainage features within open space to provide a centrepiece and focus for the area.

It is possible with the current design to drain the north west corner of Lot 372 to the east and south into the main drainage system for the area. Should the design change, engineering analysis will be required to identify and secure access to existing and planned drainage features in adjoining POS areas.

With the preference for integrating stormwater and drainage management within the development there are no unmanageable drainage issues. Careful design can integrate public open space, drainage and development. Open space areas have been oversized in the order of 1200m2 so as to allow for the integration of drainage device/s. Detailed design will be addressed through a stormwater and drainage management plan prepared at the time of subdivision. The management will incorporate nutrient stripping/sediment retention facilities in accord with engineering requirements and best practice current including landscaping.

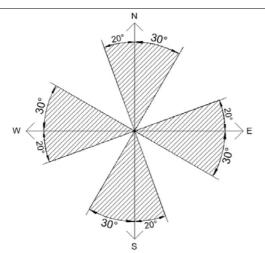
#### 3.7 Solar Access

In accord with the site and climate response objectives of the Liveable Neighbourhoods Community Code, the design and layout of lots and public open space protects important natural and cultural features, capitalises on views and provides sufficient yard space for creation of microclimates.

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In addition, to meet these objectives, the layout:

- Maximises the number of lots with the long boundaries within the preferred angle range as per the following graphic.
- Provides for, at the time of detailed subdivision design, the provision of slightly longer lots on the south side of the street.
- Ensures suitable building areas on each lot in a position that provides acceptable north wall and dwelling setbacks
- Providing for lots widths well in excess of the recommended 12m minimum where they have a long east-west axis.



Preferred orientation of long axis of lots to provide for solar design.

#### 3.9 Surrounding Development

The plan has been conscious of and is designed to link in with the development of land to the west of Horsley Road. Integral to this plan is the realignment of Horsley Road to the west to both provide for this new subdivision as well as avoid the construction of a road within the well vegetated northern portions of the Horsley Road reserve.

Development on the subject land is designed around this realignment by ensuring internal access is available for all affected lots. As an additional measure to augment the tree cover protected in the Horsley Road reserve, a 2800m2 area of open space is located adjacent to Horsley Road on the existing treed area.

For the southern section of Horsley Road where the road already exists and lot access is made; and for the lots fronting Rockford Road, consideration needs to be given to ensuring the form and style of development on the new lots will be similar to that existing on the opposite sides of these roads. To achieve this, measures such as matching built form and scale and applying similar dwelling setbacks to new development fronting these roads.

The north of the study area is bounded by the McLean Road reserve; another heavily vegetated unconstructed road reserve. Further north is general agricultural and which merges into mixed rural activities including grazing, a vineyard and the like.

Similar to Horsley Road, the layout protects the McLean Road reserve vegetation for its open space and community benefit functions. All lot access in this area is achieved via internal roadways. An adjacent copse of tree cover in the north west is protected by a proposed POS reserve. The retention and protection of all these areas serves to create a significant visual and physical buffer to the rural activities undertaken on land further north.

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To the west is Scotsdale Road and the riverside residential lots; some of which have already been resubdivided to conventional residential sizes. Given the elevation of the land above Scotsdale Road (physical constraint) and the higher level function of the road (planning constraint), the plan provides for no direct lot access to this road. Access for lots fronting the road is proposed via a service road which can be landscaped and elevated above the road. Section 4.4 illustrates and discusses this further. In accord with Council requirements, a single subdivisional road accesses Scotsdale Road adjacent to the proposed central open space spine.

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#### 4.0 LOCAL STRUCTURE PLAN

#### 4.1 The Plan In Summary

The major planning and environmental considerations that have influenced the plan are drawn from Council's Settlement Strategy. In summary these are:

- Fully serviced residential development to make the best use of this valuable town centre land.
- Provide for a range of lot sizes from sewered low density up to medium density/cottage lots.
- Consolidate public open space areas whilst as far as possible permitting independent provision of open space areas.
- Provide for joint use of open space for drainage features and promote landscaping/Public Open Space (POS) improvement as a component of the integration of drainage features.
- Provide road and pedestrian linkage upgrades to the south to promote good connections to established residential areas and new developments.
- Orient lots to POS to provide surveillance and maximise local amenity.
- Provide for solar design and solar access by maximising the number of lots within the preferred angles of north/south and east/west.

- Align road and lots where possible to provide access to the exceptional views available in the generally easterly direction.
- Create a legible layout based on modified grid alignments.

Table 1. below is a summary of Local Structure Plan Statistics. Person per household (2.46) has been derived from the Shire of Denmark 2006 census returns.

Table 1.

Total project area	29.16ha		
Estimated	329 lots/dwelling		
lot/dwelling yield	units		
Estimated ultimate	809 persons @		
population	2.46pphh		
R-Code	R 20 & R30		
Gross Density	11.2du/ha or		
	889m2/du		

Table 2. below is a summary of Public Open Space provision. It identifies the amount of POS required from each landholding (10%), the amount actually shown on the LSP, the area credited to Lots 51 & 372 due to the protection of the Mclean Road Reserve as POS and the resulting net are provided for each landholding. The net area provided then becomes the basis of cash in lieu calculations.

Table 2. Public Open Space

Lot	Area	10% POS	Area on Plan	Credit *	Net Area	Net %
50	1.0274ha	1027m2	1058m2	0	1058m2	10.2%
51	5.1287ha	5128m2	3559m2	834m2	4393m2	8.5% **
365	7.4216ha	7421m2	11024m2	0	11024m2	14.8% **
366	7.1746ha	7174m2	7540m2	0	7540m2	10.5%
372	8.4073ha	8407m2	3353m2	3024m2	6377m2	7.5% **
Total	29.1596ha	2.9159ha	2.6534ha	3858m2	3.0392ha	10.4% ***

#### Notes:

- \* Credit applies to Lots 51 & 372 to balance roading provided so the McLean Road Reserve can revert to open space.
- \*\* Cash in Lieu arrangements required for Lots 51 & 372 to balance Lot 365 overprovision.
- \*\*\* Overprovision of 0.4% to balance collocation of integrated and landscaped drainage devices.

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# Local Structure Plan Horsley Road & Rockford Road Shire of Denmark

Lot No.	LOT AREA	YIELD
Lot 50	1.0274ha	7
Lot 51	5.1287ha	58
Lot 365	7.4216ha	82
Lot 366	7.1746ha	80
Lot 372	8.4073ha	102
TOTAL	00 4 F0Ch =	200
TOTAL	29.1596ha	329

#### **LEGEND**

...

Direct access to Scotsdale Road Prohibited/Uniform Fencing



Foot Path

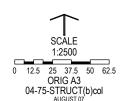
Dual Use Path

7.5m Building Setback

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#### 4.2 Local Structure Plan Context

The following figure depicts the planning context of the study area. Important issues and considerations include:

- Walkable catchments are shown. Significant areas of the site are within the 800m catchment applicable to town centres. regards 400m the local scale catchments, the site sits adjacent to what would be a 400m catchment surrounding the town centre. may make a local node possible in the extreme longer term. Discounting the suitability and practicality of a local node functioning in the short or medium term are considerations such as activity loss to the greater pull of the nearby town centre, the existing and planned low density of the general area and the lack of commitment to developing threshold catchments on rural land further north and northwest.
- As development surrounding the study area intensifies, the layout provides for lot conversion to a neighbourhood node around the central connecting intersection north of the main open space area.
- Strong connection to the town centre exists via Horsley, Rushton and Scotsdale Roads. This provides for future private and public transport links as well as non vehicular modes of transport.
- Existing open space areas include those on the Denmark River (to the east), the Community Park (to the southeast), linear open space proposed for McLean and northern portions of Horsley Road and the old hospital grounds to the south.

#### 4.3 Residential Densities.

In accord with residential densities adopted for existing inner areas within the Denmark Townsite; in accord with Council's Settlement Strategy; and so as to ensure the best use of this land, an R20 density code has been adopted for the bulk of the site. This coding permits lots

down to a minimum average of 500m2, a 10m minimum frontage, 50% private open space, 30m2 private outdoor living space and a min. 6m road setback with variable side setbacks. In high amenity areas, generally surrounding the central open space, cottage lots to the R30 code are proposed.

Although the Local Structure Plan area is limited in size, this density code and the plan allows for a range of housing types from the smaller single residential lots adjacent to public open space to larger residential lots provided so as to buffer Scotsdale Road and existing lots.

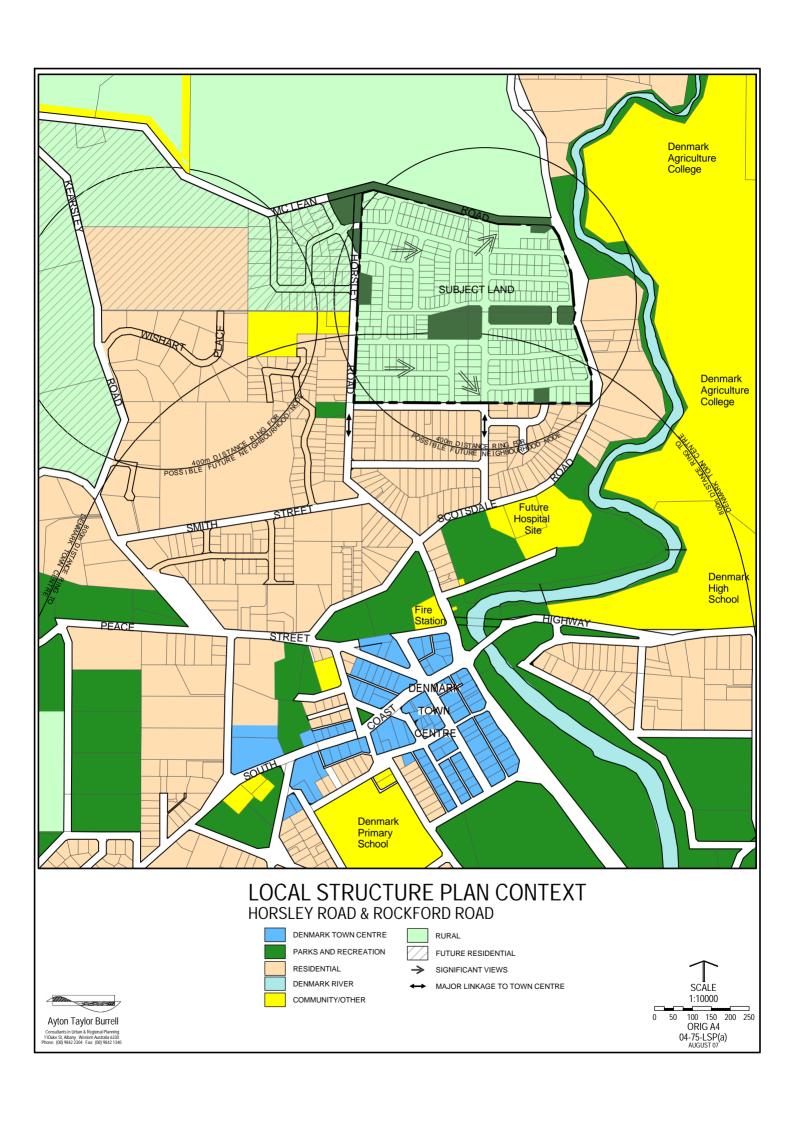
Cottage Lot (50% max Garage/Carport Frontage to protect streetscape)



The R30 cottage lots will be subject to building and access guidelines prepared by proponents at the time of subdivision. Based on Liveable Neighbourhoods guidance, it is proposed that these lots incorporate design features such as:

- Zero side setbacks.
- Minimum 12m frontages with a maximum of 50%/6m being garage/carport/parking frontage.
- Single residential cottage design.
- Built on minimum front setbacks to maximise private rear yard space and provide a high level of surveillance to the road, footpath and open space.

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#### Cottage Lot (Surveillance to road & POS)



In addition to the above, for the five cottage lots on Lot 366, it is proposed to provide a rear laneway for vehicular access with the lots and dwellings fronting and overlooking the local POS. Landscaping, uniform visually permeable fencing and a high level of design is proposed for this precinct. The following figure shows this notional layout incorporating:

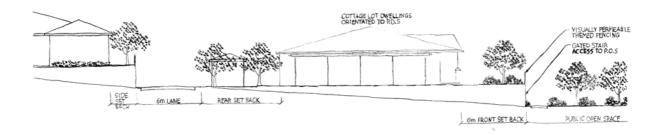
- Retaining/build up over POS.
- Uniform permeable fencing and private access gates ensuring surveillance and direct lot connection.
- Footpaths within the open space at the front of lots to help define the public/private interface.

- Building and access guidelines to ensure orientation of living area windows/doors over the open space to also ensure passive surveillance, to ensure practical vehicular access from the laneway and cover its design and construction.
- Build-up and retaining of residential lots west of the laneway so as to overview the cottage lots immediately down slope.

Cottage Lot (Fronting/Addressing POS)



#### **COTTAGE LOTS**



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In view of the form and scale of existing residential development to the west of Horsley Road and to the south of Rockford Road; coupled with the desire to have the residential development on the opposite side of the road sympathetic in nature, design treatments are proposed for the residential lots within the study area fronting these roads.

#### Proposals include:

- Applying a 7.5m setback to lots presenting their frontage to these roads.
- Allowing only single residential development on the lots fronting these roads.
- Allowing only single story development heights with minimal build-up to finished floor levels by nominating an overall maximum building height over natural ground level.

Of the estimated 329 lots, 47 are cottage lots which equates to 14% of the estimated unit yield.

Within the constraints of providing the local distributor road links to the north, the internal roads run on an east west alignment. This allows the long axis of most lots to be orientated within the preferred angles of north south and east west. Further, the layout provides for detailed design to slightly increase depths of lots on the south side of the east west streets. In addition, the LSP meets solar access objectives given lot sizes are generally in excess of the minimums (~350m2) when solar design and orientation can become a critical design consideration.

The roads duplicating access for the northern Horsley and McLean lots provide additional setbacks to the tall tree cover in these road reserves thus opening the solar aspect for these lots.

All except two lots are within the desired angles of north south and east west.

#### 4.4 Slopes and Design

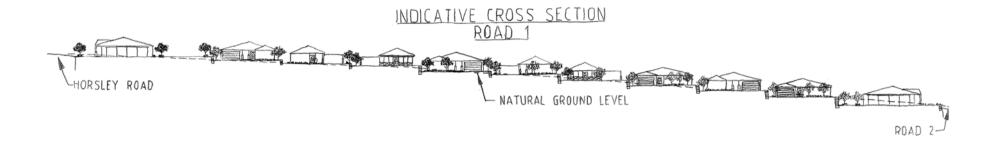
In addition to the need for Detailed Area Plan/s or Development Guidelines for the identified cottage lots, the following figure identifies retaining wall cross sections typical of the precinct. Should such retaining be entertained, 350mm retaining blocks are to be used. The design with the prevailing slopes has minimised the need for earthworks, maximised the efficiency of any required retaining, maximised north-south solar orientation and opened the pleasant eastern aspect t the bulk of lots.

In addition to the design working efficiently with retained blocks and reworked site levels, the following figure (minimised retaining for stump/pole based construction) shows that the design also works with minimal cut and fill, lightweight construction methods and reduced site disturbance.

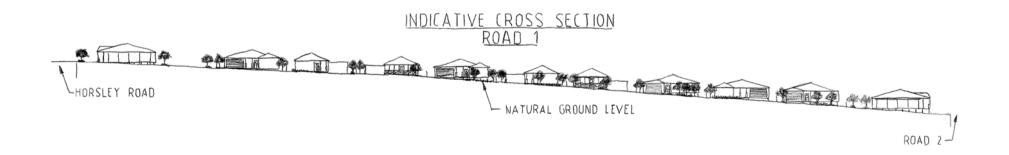
Rather than be prescriptive at this early stage and given the suitability of either option, detailed design at the subdivision stage will define the construction option to be followed. Where stump/pole based construction is proposed, design guidelines will be prepared to ensure sensitive design and uniform forms of construction.

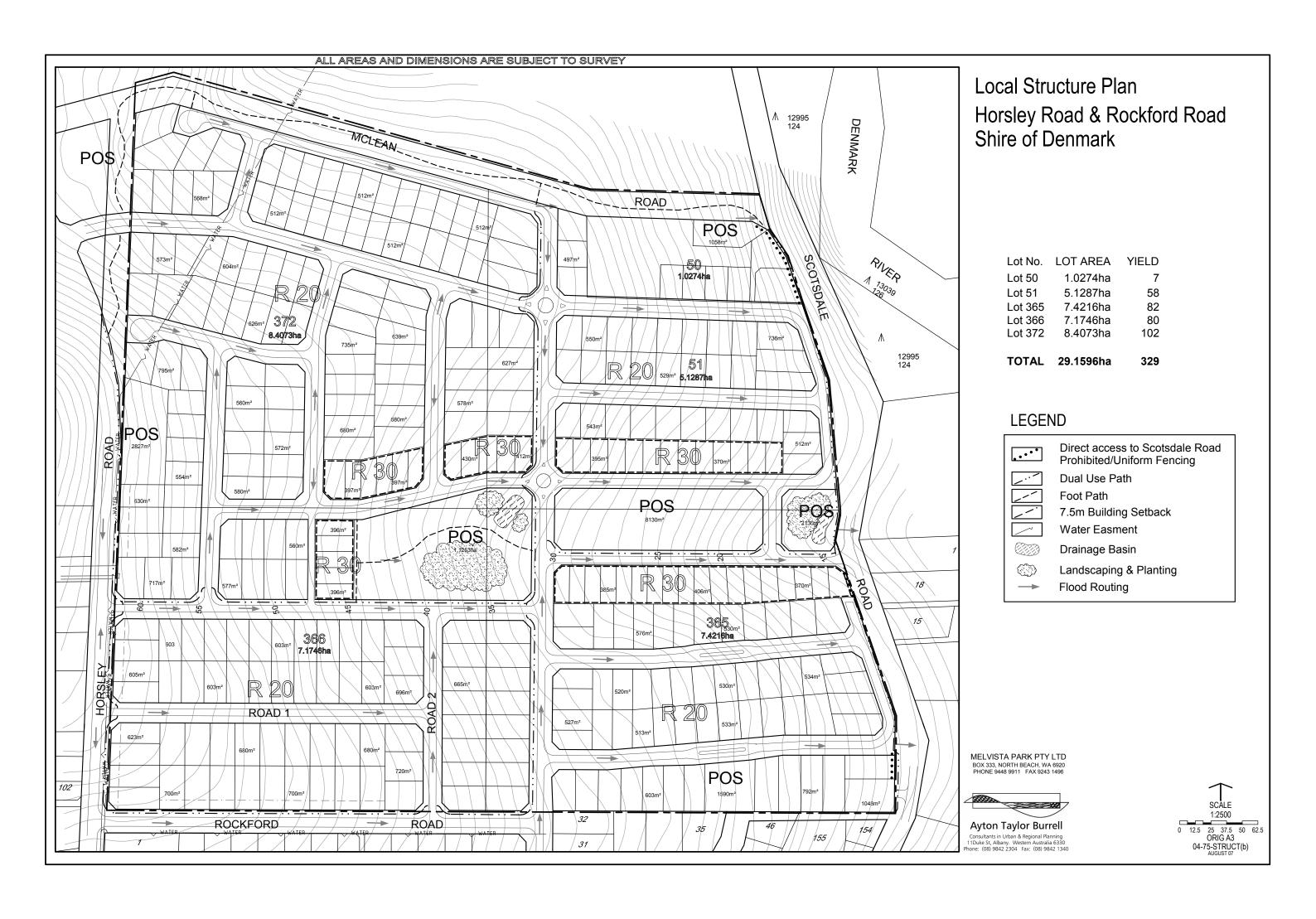
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#### Retaining Wall Option



#### Stump/Pole Based Construction Option





#### 4.5 Roads and Access

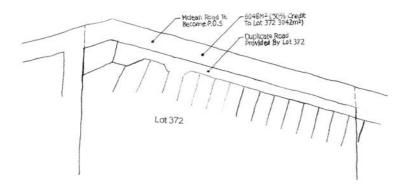
The site is well serviced with road access; however access, safety and landscape issues conspire against the use of the northern portion of Horsley and the adjoining section of McLean and Scotsdale Roads.

The design allows for the protection of the significant tree cover within both the northern sections of Horsley Road and the entire length of McLean Road. These sections of road reserve then become linear parklands providing for public open space and vegetation protection aims. The need to then duplicate these roadways falls on Lots 372 and 51. As these lots are providing additional roading so that existing road reserves can be converted to parkland, a credit to the public open space provision of these lots will be made on the basis of 50% of the road area. following fiaure illustrates arrangement.

The road network for the area includes the continuation of Rushton Street to the north and the continuation of the road duplicating Horsley to the north both as local access streets. These road reserves will then become the main non vehicular movement networks wherein dual use paths and footpaths are provided as part of the subdivision process.

The internal road network is a deformed grid aligned so as to maximise the opportunity for solar orientation of dwellings on individual lots.

McLean Road - Lot 372 POS Credit



Strong east west links are provided to ensure legibility and permeability within the precinct and also provide view corridors out to the east. Secondary links along with more minor access places are used to frame the public open space areas and provide individual lot frontage.

A service road is provided for the lots overlooking Scotsdale Road. The following figure shows a typical crossection identifying lot frontage and landscape treatment. In accord with Council's desire to allow for the spread of local traffic from Horsley and Rushton Roads, a single vehicular connection to Scotsdale Road is also provided.

Given the proposed development fronts existing sections of Horsley Road and Rockford Road, there will be the need to contributions to the upgrade and improvement of these sections of road commensurate with their status as residential streets. Contributions or upgrading will be required at the time of subdivision. All internal roads will need to be appropriately constructed by individual subdividers as lot creation necessitates.

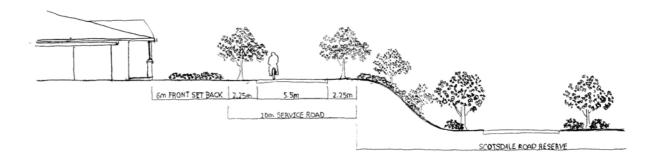
Two roundabouts are proposed on the extension of Rushton Road, no special intersection treatments are necessary. The southernmost roundabout could be constructed as a landmark feature within the estate, designed to complement the landscaping proposed in the adjacent open space.

Special construction for the laneway serving the cottage lots in the west will incorporate differing pavement treatment and reduced width carriageways, possible centre drainage and minimal verge provision. Consideration should also be given to narrowing the entrances of this laneway so as to dissuade non resident use.

Anticipated traffic volumes are outlined within Council's traffic study.

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#### SERVICE ROAD – SCOTSDALE ROAD



#### Rear Laneway (Entry Treatments)



#### 4.6 Non Vehicular Movement Network

In accord with Council's traffic study the two north south connectors will provide the main links between the area and the town centre, one via Rushton Street and the other via Horsley Road. The upgrade of these roads will incorporate construction of Dual Use Paths (DUPs) as shown on the Plan particularly including Horsley and Rushton Roads.

In terms of a DUP link to the south via the Scotsdale Road alignment, the service road will provide a safe and functional pedestrian and cycle environment in this area. A small link will need to be provided across the easternmost section of the open space. This should be designed into the POS as a part of the landscaping plan prepared at the time of subdivision.

Constructed footpaths are proposed on internal roads as shown on the plan. These provide for safe pedestrian use between the open space and the main DUPs on the second order roads within the study area. Pedestrian and cycle use will be safe and effective on-pavement on the other lowest order streets.

Alternative access to Rushton Street is available via the south eastern public open space and Powley Crescent.

The construction of more natural style low key walk trails within the vegetated sections of Horsley and McLean Roads will be provided at the time of subdivision.

#### 4.7 Public Open Space

Public open space is distributed over the Local Structure Plan area. The objective in public open space provision is to provide a consolidated site feature that whilst providing for public open space requirements, also provides for the integration of landscaped drainage devices

Given development rates within Denmark it has been necessary to align development and public open space provision to be staged along the existing lots as far as possible.

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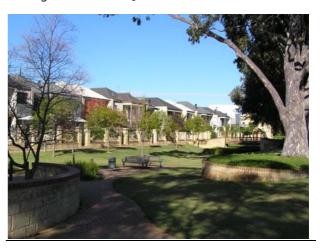
Lot 50 provides its public open space as an addition to the McLean Road reserve parkland to protect a small copse of remnant tree cover. Lots 50 and 365 public open space creates the central open space spine linking to Scotsdale Road. The public open space for Lot 366 is consolidated in one large parcel, also augmenting the central public open space area. Lot 372 public open space is provided two areas. One provides protection for remnant vegetation adjacent to Horsley Road, another rounds out the central open space area.

Public open space calculations are shown in Section 4.1. Particular features of this public open space provision are:

- Inclusion of allowances for drainage where designed devices and landscaped to enhance public open space areas. For Lots 366 and 51 these could be in the form of contoured detention and sedimentation swales. With Lot 365 the minor valley and land qualities will necessitate the integration of a more permanent water feature.
- Lot 372 and small portion of Lot 51 are to receive public open space credit for the duplication of McLean Road.
- Open Space is provided at the end of Powley Crescent to protect a copse of remnant vegetation and to provide a pedestrian link to internal roads.
- Preference has been given to framing public open space area with roads or lanes. Where cottage lots abut public open space, design guidelines will be a subdivisional requirement to ensure development fronts and addresses the public open space areas to ensure surveillance whilst also protecting residential amenity.

 Apart from the public open space areas provided to protect remnant tree cover, all other public open space will be available for generally informal active use. Concentrating the bulk of public open space provision in the central area creates a site that is big enough to cater for local needs whilst also providing a sizable break in urban form and will be developed with amenities such as playground/bbq.

Cottage Lots (Addressing POS)



 At least a pocket park exists within 200m walking distance of all lots. The consolidated central open space area is within 400m walking distance of most lots.

In addition, subject to cl 3.6.2 of WAPC Development Control Policy 2.3, a 2% POS area credit may be applied subject to the preparation and implementation of approved landscaping and POS improvement plan/s. If applied, this 2% area may be returned to development or as is more common, used for collocated drainage devices within open space areas.

Table 2 within Section 4.1 outlines POS provision. It provides for areas of shared open space and drainage. The sharing of land for these functions will be dependant on the area still being able to support an open space use, its level of development and landscaping. Areas which are wholly used for drainage purposes can not be credited as public open space.

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Section 5.1 outlines the procedure and approach for the cash in lieu arrangement required to balance the over provision of land by Lot 365.

#### Roads Framing POS (Incl Parking)



#### 4.8 Non Residential Land Uses.

#### Shopping/Commercial

It has been established and reinforced through regional commercial strategies that commercial floor space demand approximates 1.17m2 NLA/ person for major centres and 0.48m2 NLA/ person for local minor and convenience service. From this, in the context of the subject land it is assumed the Denmark Town Centre could trap all of the local centre demand. As there are losses to Albany and elsewhere, Denmark would only trap a portion of the major centre demand.

On this basis, at ultimate development it is likely the subject land could create the demand for some 380m2 additional NLA retail floor space.

The study area is between 600m and 1100m from the town centre and the full range of shopping, commercial and human services and facilities it offers. As a result providing a standalone commercial floor space allowance within the area is clearly not necessary or desirable. Well into the long term demand generated by the study area would be best used to reinforce the Denmark town centre.

#### **School Sites**

Typical primary school provision is 1 per 1250 dwelling units. This provision is stretched and skewed to community size within smaller centres such as Denmark. The Residential Settlement Strategy and draft Local Planning Strategy notes that this planning unit is adequately catered for by the existing Denmark Primary School.

#### 4.9 Infrastructure

#### Deep Sewer

Sewer services will be extended to the site via connection points on Rushton Street and Scotsdale Road. On the assumption development proceeds on a frontal basis, incremental extension should see the entire area serviced without reliance on a pump station.

#### **Electrical and Telecommunications**

Incremental extensions can be made to the existing services. Extensions and lot hookups will be via underground cabling generally with shared trenching. Padmount sites will need to be provided as required. In accord with Western Power Policy the high voltage overhead service located within the Rushton Street will should be undergrounded as a condition of subdivision.

#### Drainage

with The obiective stormwater management and the site will be to integrate drainage features with public open space provision. This has the effect of essentially providing larger public open space areas (by virtue of adding a proportion of the drainage device area) and ensuring public open space undergoes improvement by virtue of the subdivisional need to incorporate contoured stormwater management devices into public open space as landscape features. These features may include grassed swales suitable for active use of smaller permanent water bodies landscaped and planted so as to be attractive site features.

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In accord with current best practice for stormwater management, stormwater devices will be designed and constructed to accommodate 1:10 year/72 hour storm events and provide for safe flood routing. POS areas are sized and laid out such that integrated drainage devices can be constructed with POS credited as per Development Control Policy and Liveable Neighbourhoods guidance. Allowances and calculations are shown in Section 1.8. Integration of drainage devices and the use of POS credits will be dependant on the preparation, approval and implementation of landscaping and improvement plans at the time of subdivision.

In terms of the individual lots:

- For Lots 372 and 366, areas draining to the east may be serviced by broad shallow detention, infiltration and sedimentation swales fully integrated within the proposed public open space. For that small area of Lot 372 that may drain to the north west, arrangements are required to secure offsite outfall structures.
- Lot 51 will be draining down to the eastern most public open space. A small basin could be integrated within this parcel to provide for peak flow attention and sedimentation.
- Lot 365 accommodating the valley and the drainage line is compromised by these features. The public open space generally follows the valley floor. Due to the qualities of the site it is possible that stormwater management be attended to via infiltration, detention and sedimentation swales on the mid slopes integrated with the public open space feeding to a developed feature in the east adjacent to Scotsdale Road.

In accord with conventional subdivision requirements, a stormwater management plan will be required to demonstrate established standards have been met in terms of detention and flow attenuation such that stormwater leaving the site post development mirrors that of the pre development situation. Stormwater management plans will also be required to demonstrate sediment removal, nutrient stripping, infiltration, erosion control, and landscaping/beautification and integration as either usable areas or landscape features. All Council and Department of Environment standards as well as and the principles of water sensitive urban design will need to be met.

#### 4.10 Other Matters

Given the context of the land and the manner in which it is adjacent to the town centre, is also adjacent to established rural pursuits, the Golden Hill Steiner School, gazetted tourist drives and special residential/rural areas, it is proposed that purchasers of the lots be advised of these activities prior to settling on future lots.

In addition to the above, future conditions of subdivision will require inclusions such as:

- Street lighting.
- Verge reinstatement/treatment.
- Road construction standards.
- Battleaxe leg construction and drainage.
- Lot stormwater connections.
- Street fire hydrant provision.
- Vegetation protection within public open space.
- Provision of/and maintenance of landscaping within public open space and road reserves.
- Reservation and vesting of reserve areas.
- Extension of road reserves to boundaries to facilitate adjoining subdivision.
- Uniform fencing and access control to Scotsdale Road.
- Foot paths/dual use paths.
- Reticulated water and sewer.

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- Telecommunication infrastructure.
- Nutrient Stripping/Sediment Retention Drainage Management Plan.
- Underground power provision

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#### 5.0 IMPLEMENTATION

#### 5.1 Coordination

The LSP is structured such that individual lots can proceed with subdivision at will. There are just two exceptions to this general statement. The first is that the development of Lot 51 is dependant on road connections becoming available via either Lot 372 or 365 and that the development of Lot 50 is contingent on access becoming available via Lot 51.

Lot 51 being dependant on Lot 372 for access does not appear a great issue given this land is under the same ownership at the moment. This also ensures logical staging and evolution of development within the precinct.

In terms of development intentions, Lot 366 is likely to be developed in the short term with the development of the other lots expected as services are extended from this site. If the development of Lot 366 and 372 precede that of Lots 365 and 51 respectively, drainage easements/private agreements may be required to implement stormwater management requirements. "Cash in lieu" of the provision of open space will be required for Lots 372 & 51 to compensate the overprovision of Lot 365.

#### 5.2 Cash in Lieu of the Provision of POS

As discussed in Section 4.1, 10% of subdivisional areas are required as POS. An additional area is included in this provision to balance integrated and landscaped drainage devices. As a result, the benchmark provision is set at 10.4% POS. On this basis, subject to detailed design, it is only Lot 51 and Lot 372 show a shortfall of 970m2 and 2400m2 respectively or 3370m2 total.

On the other side of the ledger, Lot 365 shows an over provision of some 3200m2.

On this basis, it is proposed a cash in lieu arrangement be entered so that, on subdivision of Lots 51 and or 372, the value of the land shortfall is transferred to Council to be held in trust pending the subdivision of Lot 365 and its overprovision.

Section 153 of the Planning and Development Act 2005 sets out the procedure for requiring and setting aside cash in lieu funds. This includes that the WAPC can require cash in lieu as a condition of subdivision. WAPC Planning Bulletin 21 and WAPCV DC Policy 2.3 also provides guidance for obtaining and allotting cash in lieu amounts with the qualification that, as a result of the Planning and Development Act 2005, the WAPC, on the advice of Council, can now condition provision rather than simply request provision.

In the instance where Lot 51 and/or Lot 372 are subdivided prior to Lot 365, Council would request the imposition of a cash in lieu condition for the shortfall land areas (970m2/2300m2). These monies would then be held in trust pending the subdivision of Lot 365 and it's over provision of POS.

In the instance where Lot 365 is subdivided prior to Lots 51/372, its overprovision will not be repaid until Lots 51/372 are subdivided and a cash in lieu condition is applied. The balancing factor in this arrangement is that the respective cash values are determined at the time of subsequent subdivision. As a result, the repayment to Lot 365 could be elevated as a result of rising land values in the intervening period.

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#### 5.3 Processing

Following completion of the Local Structure Plan, Scheme Amendments to zone the land as Residential will follow. Once appropriately zoned subdivision can be pursued by the landowners.

Given that precise Public Open Space Provision can only be defined at the subdivision stage, it is not proposed to zone the public open space at the amendment stage. The subdivision approval process will ensure the appropriate amount and location of public open space is provided as guided by this LSP.

#### 5.4 Conclusion

In conclusion, the LSP provides a residential overlay that provides for the logical and coordinated development of the site whilst also respecting existing lot boundaries and the need to allow subdivision to be flexibly staged so as to meet market demands.

The plan identifies critical on and offsite road connections, the need for consolidated public open space provision and integrated stormwater management.

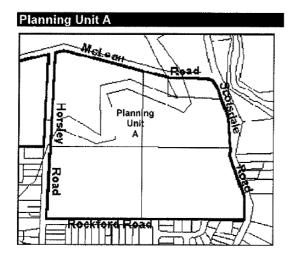
Used as a guide to the more detailed requirements of rezoning and subdivision, this plan will see the subject land meet Council's intentions for the land and become an important extension to the townsite.

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## Appendix A Shire of Denmark Local Planning Strategy

Shire of Denmark

Local Planning Strategy



#### Natural Features

- Slopes down toward the east ranging from 2.5 to 5% on the hill top to 8 to 15% elsewhere.
- Small area in north-east has steep slopes (15 to 30%).
- Mostly cleared grazing land supporting good pastures. Pocket of remnant Karri and Redgum in south-east corner is a site feature.
- Highly visible from the portion of Scotsdale Road that the site abuts and moderately visible from South Coast Highway travelling toward Denmark from the east. Well screened from the town centre.
- Scenic Rural Landscape with excellent views obtained in an easterly direction.

#### Land Use/Surrounding Uses

- Site is utilised as grazing land. Two houses are on lot 365 and one on each of Lots 366 and 372. A house and a holiday accommodation dwelling are on lot 50 with lot 51 being vacant.
- Surrounding landuse comprises residential the south, rural (grazing) and residential the west, rural uses toward the north and rural and residential uses the east.
- Abuts Unit B.

#### Land Capability On-site Disposal

 Soils consist of: Keystone (Kb) Soil Group 1 on the western portion.(duplex soils with brown gravelly surface horizons over a yellow-brown and red brown clay soil.) Major Vaileys (V3) - Soil Group 2 on the eastern half (yellow duplex soils comprise the slopes while deep loamy soils are found on narrow terraces). Trent (TR - Soil Group 4 on a small portion of the south central boundary (gravelly sandy yellow duplex soils, with some gravelly sands and lateritic duricrust.).

Overall shows a moderate to high capability.

#### Servicing Opportunities/Constraints

- McLean Road on the northern boundary is unconstructed. Otherwise the area is very accessible via existing sealed roads.
   Vehicular access to Scotsdale Road needs to be controlled.
- The area is readily sewered via the existing sewer in Rushton Street and by extending the existing sewer in Scotsdale Road.
- The area can be serviced with water from the reservoir on the west side of Horsley Road. (Maximum service RL65).
- The site drains to the Denmark River, immediately to the east. The drainage line could be utilised for retention basins and POS.

#### Planning Issues

- Area forms a logical extension of the townsite, can be serviced and has excellent views and aspect.
- Visual impact of development requires consideration.
- Remnant karri trees to be protected, preferably within POS.
- Stormwater drainage to be managed on-site and utilise drainage line for sedimentation basins and POS.
- Possible need for commercial/community facilities.
- A draft Structure Plan was prepared for this planning unit in 1999 and Council in December 1999 required modifications to be carried out.
- Potential yield 250 sewered lots.

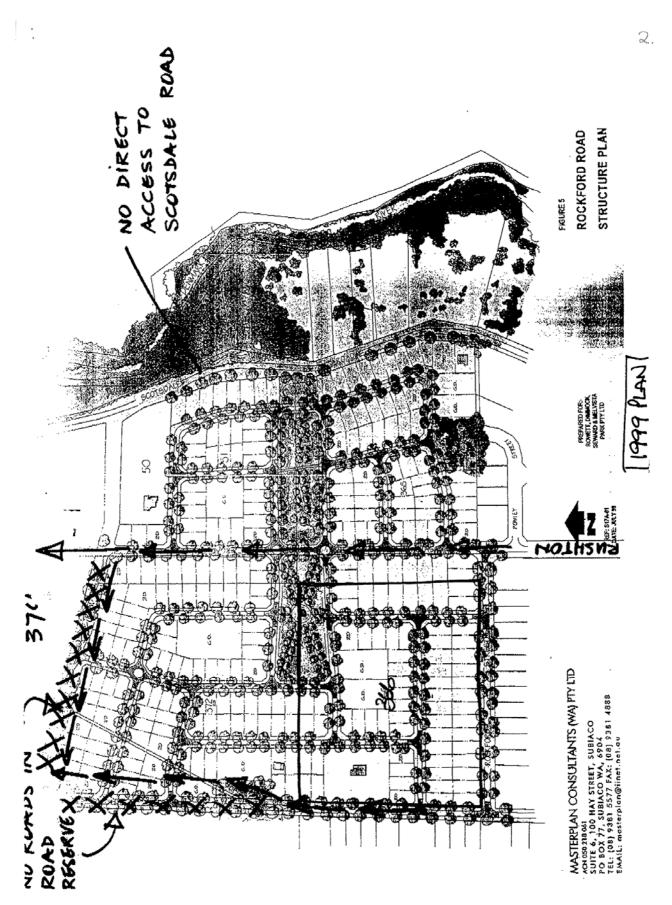
Shire of Denmark Local Planning Strategy

#### Planning Unit A Planning Recommendations/Policy

- Prior to further development/rezoning, a structure plan be prepared which provides for fully serviced residential development and addresses the following issues:
  - visual impact
  - retention and protection of remnant vegetation
  - landuse conflict
  - stormwater management
  - POS provision
  - vehicular access to Scotsdale Road
  - commercial/community facilities
  - Liveable Neighbourhoods Community Design Code principles

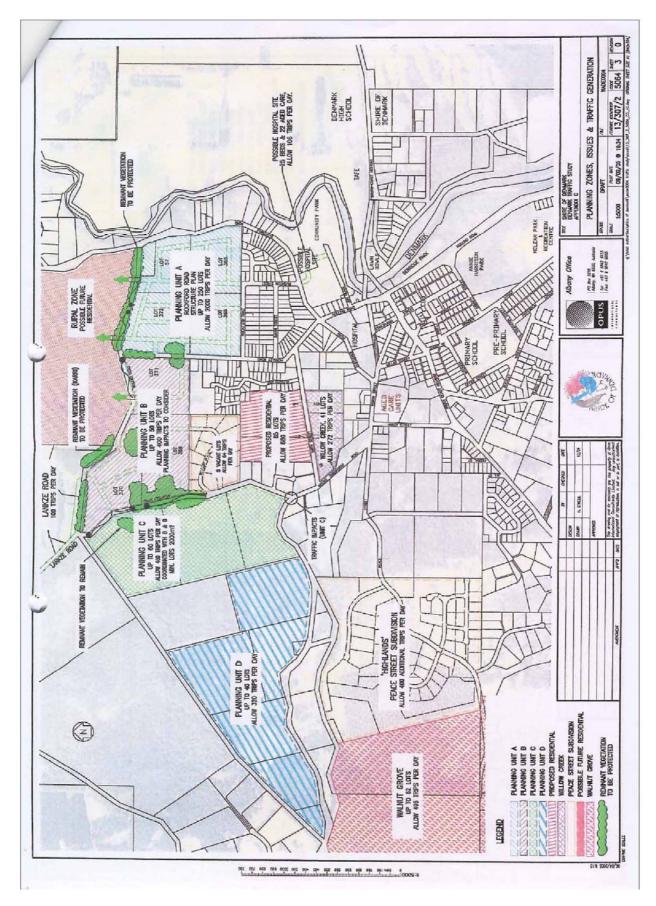
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#### Appendix B 1999 Draft Local Structure Plan

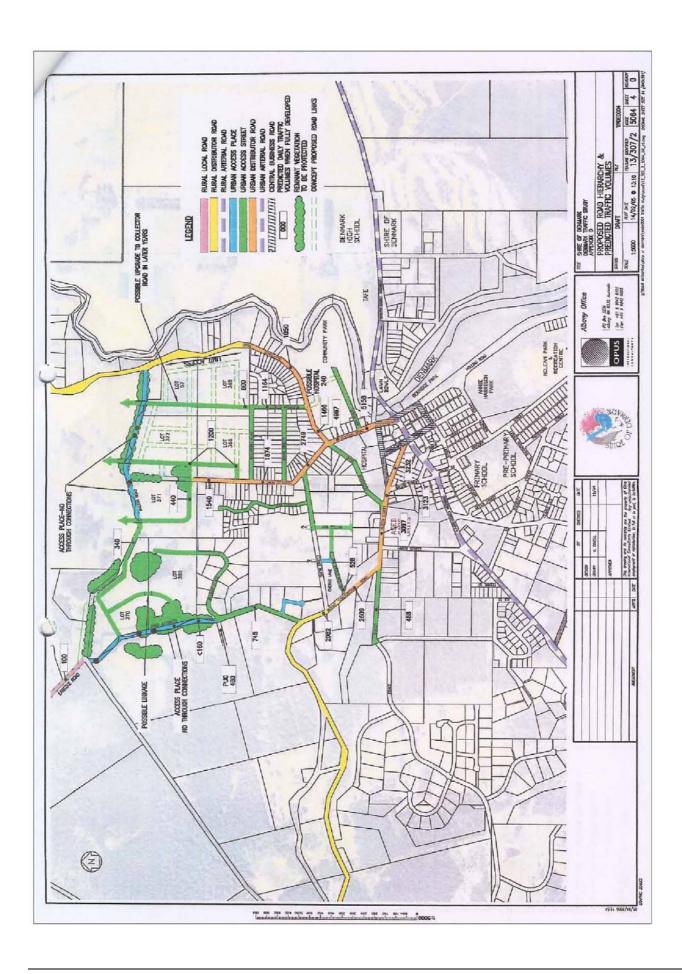


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Appendix C Shire of Denmark Traffic Study (2005)



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## Shire of Denmark Town Planning Scheme No. 3 Amendment No. 119 Schedule of Submissions

No	Name/Address of Submitter	Summary of Submissions	Officer comment	Council Recommendations
1	Environmental Protection Authority Locked Bag 33 Cloisters Square Perth WA 6000	Advised that the proposed scheme amendment not be assessed under Part IV of the EP Act but provides the following advice and recommendations on environmental issues:  • Contamination: The site may have been use as a vineyard and there may be possibilities of soil contamination. A preliminary site investigation should be carried out and if found to be contaminated, a Site Remediation and Validation Report should be prepared.	A site contamination report should be undertaken where it is proposed to development land previously use for agricultural purposes into a more sensitive land uses such as residential. The contamination report to determine if the soil and/or groundwater have been impacted and, if so, whether there is a risk to human health or the environment.	Upheld  A preliminary site investigation to determine if the site is contaminated, and if so, a Site Remediation and Validation Report to be prepared to the satisfaction of Department of Environment and Conservation, Contaminates Sites Branch.
		Stormwater and Drainage     Management: The site drains into the Denmark River. Surface water discharge should be controlled through appropriate drainage systems to avoid erosion and pollution while still maintaining the natural flow of	See comments under Department of Water submission No. 2.	Upheld.  See comments under Department of Water submission No. 2.

No	Name/Address of Submitter	Summary of Submissions	Officer comment	Council Recommendations
		discharge and pre-development levels.		
2	Department of Water PO Box 525 Albany WA 6330	Does not support the Scheme Amendment until a Local Water Management Strategy is prepared in accordance with "Developing a Local Water Management Strategy" Dec 2008 and to the satisfaction of DoW in consultation with the Shire.	The subject land is in close proximity to the Denmark River, a major tributary of Wilson Inlet. The headwater of a drainage line exists immediately to the south of Lot 51 and this flow for app 450m before entering the Denmark River. The subject land slopes towards he Denmark River and any runoff or subsurface flow is likely to enter the drainage line and flow to Denmark River. Given the site's location, any proposal to rezone the land to allow residential development should be proceeded with a Local Urban Water Management Strategy.  The Horsley/Rockford Road Structure Plan was adopted by Council in 2007 which predates the WAPC's "Better Urban Water Management" (Oct 2008). This document requires that Local Water Management Strategies be prepared at Structure Plan stage.	Upheld  A Local Water Management Strategy to be prepared to the satisfaction of Department of Water and in consultation with the Shire and its results considered as part of the amendment. The Strategy to consider the relevant water management issues on adjoining properties which lie downhill/downstream from the subject lot.
3	Water Corporation PO Box 100	No objection to the rezoning proceeding and provides the following general comments and		

No	Name/Address of Submitter	Summary of Submissions	Officer comment	Council Recommendations
	Leederville WA 6902	relation to water and wastewater servicing:		
		The land can be connected to the Water Corporation's water supply scheme in the future, however, the water distribution and source capacity in the area is currently insufficient to serve the proposed subdivision and development. The Corporation is currently undertaking major water source, distribution and storage upgrading and completion is anticipated in 2010/11. Subdivision and development of the land will not be able to proceed until the works have been completed.	Noted	No changes to amendment document required.
		A major water transfer main currently traverses the north-west portion of Lot 372. Water mains must be adequately protected within road reserve or public open space and cannot be located within private residential properties for safety reasons. The Structure Plan indicates the water main on the site characteristic plan (Appendix 4) but has not been reflected on the Local Structure Plan. The Structure Plan must be modified prior to	The Structure Plan to be modified to address the requirement as stipulated by Water Corporation.	Upheld.  Undertake modification of the Structure Plan which shows the Water Corporation's water main within road reserve or public open space to provide adequate, ongoing protection of the water main.

No	Name/Address of Submitter	Summary of Submissions	Officer comment	Council Recommendations
		subdivision and in consultation with Water Corporation to provide adequate ongoing protection for the water main.		
		The sewerage planning divides the subject land into two subcatchments i.e. the western subcatchment and eastern subcatchment. The routes for the required sewers must be adequately accommodation within road reserves through the development area.	Noted. This requirement can be addressed at subdivision stage.	No changes to amendment document required.
		Developer of the land will be required to provide and fund al all water and sewerage reticulation and pay headworks contributions at the subdivision stage. New works and upgrading of existing works may also be required to cater for the demand generated by the development of this land.	Noted. This requirement can be addressed at subdivision stage.	No changes to amendment document required.
4	Department of Indigenous Affairs PO Box 5091 Albany WA 6330	It is possible that there are Aboriginal Heritage sites which have not been entered on the Register of Aboriginal Sites. All sites are protected whether they are known to DIA or not.	The Aboriginal Act requires that the landowner undertake necessary steps to protect known and unknown Aboriginal Sites. There is no impact at Scheme Amendment Stage.	No changes to amendment document required.

No	Name/Address of Submitter	Summary of Submissions	Officer comment	Council Recommendations
		DIA further outlines procedures to enable all relevant parties to follow the requirements of the Act and recommends that an ethnographic and archaeological survey of the area is undertaken.		
5	Fire and Emergency Services Authorities Great Southern Region 5 Hercules Crescent Albany WA 6330	No objection.  Bush Fire risk must be considered in planning decisions at subdivision and construction stages.	Noted.	No changes to amendment document required.
6	Department of Health PO Box 8172 Perth Business Centre WA 6849	No objection to the rezoning proposal subject to all developments being connected to deep sewer in order to comply with the provisions of the draft Country Sewerage Policy.	It is planned for sewerage to be extended to the site via connection point on Rushton Street and Scotsdale Road.	No changes to amendment document required.
7	Ratepayer	Subdivision and development will generate increased run-off to the natural drainage line within Lot 365. Drainage will not be able to be contained on site and future acquisition of part of Lot 365 is expected.	The concern expressed by the adjoining land holder reflects that of Department of Water and EPA. See comments under submission No. 2.	Upheld  See comments under submission No. 2

No	Name/Address of Submitter	Summary of Submissions	Officer comment	Council Recommendations
8	Ratepayer	Object to the Amendment on the following grounds: Express concerns with regards to stormwater and surface run-off as follows:  No data to support that all drainage can be contained on site.  No water management plan provided included post and preflows.  Increased risk of flooding to their property,  Object to property being used for drainage purposes.	The concern expressed by the adjoining land holder reflects that of Department of Water and EPA. See comments under submission No. 2	Upheld See comments under submission No. 2.
		The landscape buffer along Scotsdale Road should be at least 10m for visual amenity reasons.	Council resolution of October 2008 requires vegetated screening on Scotsdale Road. This portion of Scotsdale Road is the commencement of a significant tourist road for the Shire. What is normally reflective of a tourist drive is scenic natural environment, rural landscape, wineries and other similar tourist activities. It is recommended that appropriate vegetation planting be provided to screen the urban environment that the proposed subdivision will introduce. Vegetation screening can	Upheld. Vegetation screening along Scotsdale Road has been required under Council resolution of October 2008 and is therefore covered under this resolution.

No	Name/Address of Submitter	Summary of Submissions	Officer comment	Council Recommendations
			be undertaken through a combination of planting on the road reserve and within the proposed subdivision.	
		There is no provision for community facilities.	The public open space shown on the Horsley/Rockford Road Local Structure Plan serves as community spaces for active and passive recreational needs. There are no identified needs for any other community facilities required on the subject land.	No changes to amendment document required.
9	Ratepayer	Do not object to the rezoning. To residential but object the R20 density code for the following reasons:  • It represents high density living in a town that boasts an open country lifestyle.  • It has well document history of un-savory social ramifications.  • R5 and R10 is a more appropriate density.	The subject land is considered ideal for residential development at R20 as it is located 1km from the Denmark town centre and good access to services and facilities, including ready availability of engineering services including roads, sewer, water, power and telecommunication.  R20 residential development will therefore result in a sustainable use of developable land.	No changes to amendment document required.
10	Ratepayer	As per submission No.9	As per submission No.9	As per submission No.9
11	Ratepayer	As per submission No.9	As per submission No.9	As per submission No.9

No	Name/Address of Submitter	Summary of Submissions	Officer comment	Council Recommendations
12	Ratepayer	As per submission No.9	As per submission No.9	As per submission No.9



Government of Western Australia

Department of Water

Shire of Denmark

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looking after all our water needs

9 DEC 2009

Your ref:

Dur ref:

TPS3/A119

Enquiries: Daniel Endacott

RF729/SRS25628

DATE LPH

COUNCILLORS
CEO
DIR of FINANCE

DIR of PLANNING
DIR of INFRASTRUCTURE

R of COMMUNITY

Chief Executive Officer Shire of Denmark PO Box 183 Denmark WA 6333

Dear Sir,

Re: Shire of Denmark Town Planning Scheme No. 3 – Amendment No. 119

Thank you for the opportunity to comment on the above proposal. The Department of Water (DoW) is not in a position to support the proposal until the following issue is addressed:

### **Urban Water Management**

The subject land is located within the catchment of Wilson Inlet, a waterway of significant environmental, social and economic value to the region. The land is in close proximity to the Denmark River, a major tributary of Wilson Inlet and itself a waterway of significant value. The headwater of a drainage line exists immediately to the south of Lot 51, and this flows for approximately 450m before entering the Denmark River. The subject land slopes towards the Denmark River and any runoff or subsurface flow is likely to enter the drainage line and flow to Denmark River. Given the site's location, any proposal to rezone the land to allow residential development needs to be carefully planned to ensure there are no negative impacts on water resources.

It is noted that the Horsley/Rockford Road Structure Plan was originally adopted by Council in 2007 subject to modifications. The development of the structure plan pre-dated the WAPC's 'Better Urban Water Management' (October 2008), which requires a Local Water Management Strategy (LWMS) be prepared with the structure plan. Given that no LWMS exists for the subject land, the DoW requests that a LWMS be developed at the scheme amendment stage. This is consistent with the 'Better Urban Water Management' framework, which states that an application for amendment to a town planning scheme and/or the development of a local structure plan should be accompanied by a Local Water Management Strategy (LWMS).

The LWMS should provide an outline of how all relevant water management issues on the site (including stormwater) will be addressed in accordance with water sensitive urban design principles. The DoW's guideline 'Interim: Developing a local water management strategy' (December 2008) provides guidance on developing a suitable LWMS. The DoW has a preference that stormwater designs allow for the treatment and infiltration/attenuation of stormwater higher in the catchment, rather than using the existing drainage line as the initial and primary treatment/storage area.

The LWMS should be completed to the satisfaction of the DoW, in consultation with the Shire of Denmark. Once a LWMS is approved, an Urban Water Management Plan will be required as a condition of subdivision.

Should you wish to discuss this matter further please contact Daniel Endacott of this office.

Yours sincerely

MICK OWENS ACTING REGIONAL MANAGER SOUTH COAST REGION

4<sup>th</sup> December 2009



Your Ref:

TPS3/A119; Grange 4889250

Our Ref:

JT1 2010 02192 V01 Brett Coombes

Enquiries: Phone:

08 9420 3165 Facsimile 08 9420 3193

4 March 2010

Chief Executive Officer Shire of Denmark PO Box 183 DENMARK WA 6333

Attention: Cindy Simpson

629 Newcastle Street Leederville 6007 Western Australia

PO Box 100 Leederville 6902 Perth Western Australia Tel (+61 8) 9420 2420

www.watercorporation.com.au
ABN 28 003 434 917

### Shire of Denmark Town Planning Scheme No.3 - Amendment No.119

Thank you for your letter of 20 October 2009 inviting comments from the Water Corporation on the above rezoning.

The subject land is located within the Water Corporation's Operating Licence areas for water and wastewater. Services can be provided to future subdivisions in the area by undertaking extensions and upgrades to the existing network, at the developers' cost.

The Corporation has no objections to the rezoning proceeding and provides the following general comments in relation to water and wastewater servicing.

#### Water

While the land can be connected to the Water Corporation's water supply scheme in the future, the water distribution and source capacity in the area is currently insufficient to service the proposed subdivision and development indicated on the Subdivision Guide Plan accompanying the amendment.

The Corporation is currently undertaking major water source, distribution and storage upgrades, including construction of a major storage tank on McLean Road and installation of water transfer mains to ensure adequate supply to the town. It is anticipated that these works will be completed in 2010/11. While the Corporation has no objections to the rezoning of this land, any subdivision and development of the land will not be able to proceed until the works have been completed.

A major water transfer main currently traverses the north-west portion of Lot 372 (see attached diagram). Water mains must be adequately protected within road reserves or public open space and cannot be located within private residential properties for safety reasons. The location of the water main is indicated on Appendix 4 ("Site Characteristics" plan) but has not been reflected on the Local Structure Plan accompanying the amendment. The Structure Plan must be modified prior to subdivision and in consultation with the Water Corporation to provide adequate, ongoing protection for the water main.



#### Wastewater servicing

The Water Corporation has conducted wastewater scheme planning for the locality. The sewerage planning for this area divides the subject land into two sub-catchments, roughly east and west of the north-south common boundary between Lots 372 & 366 and Lots 51 & 365.

Wastewater generated in the western sub-catchment will gravitate to a 225mm diameter sewer that will need to connect to the existing sewer in Rushton Street to the south of the site. Wastewater generated in the eastern sub-catchment will gravitate to the east and south and will connect to an existing sewer in Rushton Road near the south-eastern corner of Lot 365. The routes for the required sewers must be adequately accommodated within road reserves through the development area.

**Funding** 

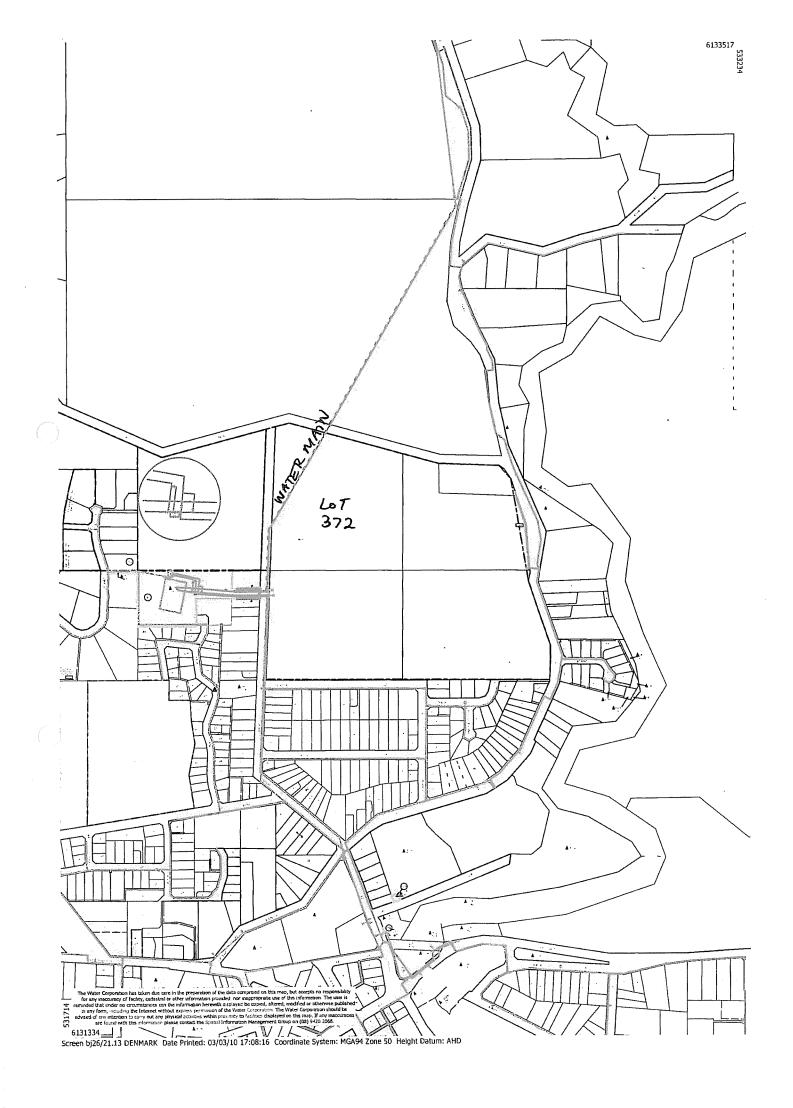
The developers of this land will be required to provide and fund all water and sewerage reticulation and to pay headworks contributions at the subdivision stage. New works and the upgrading of existing works may also be required to cater for the demand generated by the development of this land.

Should you have any further queries or need additional information in this regard please contact Brett Coombes on (08) 9420-3165.

Fov Peter Howard

Manager Land Planning Development Services Branch

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# Government of Western Australia Department of Indigenous Affairs



### Southern Regional Office

**ENQUIRIES:** 

Harley Coyne

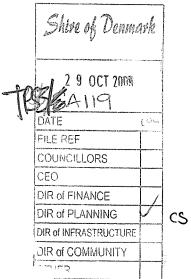
OUR REF:

SCHEME AMMENDMENT NO. 119

YOUR REF:

TPS3/A119 CS/KR

Chief Executive Officer PO Box 183 Denmark WA 6333



Dear Sir,

### RE. REQUEST FOR COMMENT ON SHIRE OF DENMARK TOWN PLANNING SCHEME NO. 3 – AMMENDMENT NO. 119

Thank you for your correspondence dated 20 October 2009 seeking comment on the abovementioned Amendment. After consideration of the Aboriginal heritage values related to this particular location the Department of Indigenous Affairs (DIA) would like to provide the following advice.

A search of the electronic portion of the Register of Aboriginal Sites has been undertaken and the results of which indicate that the Denmark Shire contains a number of registered Aboriginal Heritage sites near the area prescribed.

It is possible that there are Aboriginal Heritage sites contained within the area of the plan that have not yet been entered on the Register of Aboriginal Sites. The *Aboriginal Heritage Act 1972* ("the Act") protects all Aboriginal sites in Western Australia whether they are known to the Department of Indigenous Affairs ("DIA") or not. The procedures to enable all relevant parties to follow the requirements of the Act are outlined below.

Due to the known cultural sensitivity of the area and to ensure that all Aboriginal heritage issues are properly addressed the proponent may wish to consider conducting ethnographic and archaeological surveys of the area. This should ensure that all Aboriginal interest groups are consulted so that all sites on the designated land are avoided or identified. Such a survey would involve archival research, consultations and on the ground inspections. A survey should also ensure that the provisions of the Act are met. Although DIA is not able to recommend individual consultants, contact details of the professional associations whose members conduct surveys are attached.

It is DIA's preference that any development plans are modified to avoid damaging or altering any site. If this is not possible, and in order to avoid committing an offence under the Act, the landowner should seek the Minister for Indigenous Affairs' prior written consent to use the land.

This is done by submitting a notice in writing under section 18 of the Act ("a section 18 Notice") to the Aboriginal Cultural Material Committee. Guidelines for lodging a section 18 Notice are available from DIA's website at <a href="http://www.dia.wa.gov.au/Heritage/Standardsweb/s18Notice/s18Toc.aspx">http://www.dia.wa.gov.au/Heritage/Standardsweb/s18Notice/s18Toc.aspx</a>.

Please do not hesitate to contact Harley Coyne at this office if we can be of further assistance.

Yours sincerely

ANTHONY GALANTE REGIONAL MANAGER

27 OCTOBER 2009

att: Professional Anthropological and Archaeological Organisations in WA.

### ANTHROPOLOGICAL AND ARCHAEOLOGICAL ORGANISATIONS IN WA

### FOR ADVICE ON CONSULTANTS TO UNDERTTAKE ABORIGINAL HERITAGE ASSESSMENT SURVEYS

Please note: The Department of Indigenous Affairs (DIA) does not accept any responsibility for the choice of consultant or outcomes.

For advice on the conduct of surveys, including legislative requirements, contact the Department of Indigenous Affairs or refer to the web page at <a href="https://www.dia.wa.gov.au">www.dia.wa.gov.au</a>.

Anthropological Society of Western Australia Inc. - Professional Section

CONTACT: An alphabetical list of consultants who are members of ASWA can be found at the ASWA website under the heading Consultants:

http://www.anthropologywa.org/list.html

Australasian Association of Professional and Consulting Anthropologists and Archaeologists Inc.

CONTACT: A list of consultants who are members of AAPCAA can be found at the AAPCAA

website:

http://www.aapcaa.asn.au/consultancy.htm

Australian Association of Consulting Archaeologists Inc. - WA Chapter

CONTACT: Ms Gaye Nayton

10 Princeton Court THORNLIE WA 6108 Ph: (08) 9459 6203

E-mail: gnayton@cygnus.uwa.edu.au

Internet: http://aacia.com.au

[Revised October 2009] pjr1341O.doc



Your Ref: Our Ref: TPS3/A103 AL1823

Contact:

Russell Gould

Chief Executive Officer Shire of Denmark PO Box 183 DENMARK WA 6333

Attention:

Mr Dale Stewart

Dear Dale,

RE: Shire of Denmark Town Planning Scheme No. 3 – Amendment No. 119 - rezone Lot 372 Horsley Rd and Lot 51 Scotsdale Rd, Denmark from Rural to Residential zone.

Thank you for your letter dated 20 October 2009 regarding the above referral. FESA has no objections to the rezoning of the subject land however the following comments should be noted.

In relation to the ongoing development of this application, Bush Fire Risk must be considered in planning decisions to avoid increasing the risk through inappropriately located or designed land use and development. The Planning for Bush Fire Protection document and WAPC Policy DC 3.7 cover the requirements for subdivisions to address on ground fire protection issues. Australian Standard 3959 cover the Standard for Construction of Buildings in Bushfire-Prone Areas. The requirements of all 3 documents need to be considered in total when dealing with any subdivision development.

Should you require further information please contact me on the above number.

Yours faithfully,

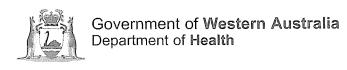
RUSSELL GOULD

DISTRICT MANAGER FESA OPERATIONAL SERVICES

**GREAT SOUTHERN REGION** 

Russell Gould.

**25 NOVEMBER 2009** 



Your Ref:

TPS3/A119 CS/KR

Our Ref:

EHB-00002/03

Enquiries:

Allen Tan (9388 4938)

Chief Executive Officer Shire of Denmark PO Box 183 DENMARK WA 6333 DATE LP
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CEO
DIR of FINANCE
DIR of PLANNING
DIR of INFRASTRUCTURE
DIR of COMMUNITY
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Cindy.

Dear Sir/Madam

## SHIRE OF DENMARK TOWN PLANNING SCHEME No. 3 – AMENDMENT No. 119

Thank you for your letter of 20 October 2009 regarding the above.

The Department of Health has no objection to the rezoning proposal subject to all developments being connected to deep sewer in order to comply with the provisions of the draft Country Sewerage Policy.

Yours faithfully

Richard Theobald

MANAGER WATER UNIT

**ENVIRONMENTAL HEALTH DIRECTORATE** 

**PUBLIC HEALTH DIVISION** 

23 November 2009

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28 November 2009

Chief Executive Officer Shire of Denmark PO Box 183 Denmark WA 6333

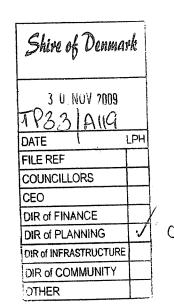
Dear Sir,

### Shire of Denmark Town Planning Scheme No. 3 - Amendment No. 119

With regard to the above Scheme Amendment, we wish to make it clear that any subdivision and subsequent development adjacent to our property Lot365 must take cognizance of the fact that such development will generate increased run-off which will end up in the natural drainage-line within our northern boundary. Under no circumstances would we agree at attempts by the developers to contain the increased drainage within their own land areas.; instead, our understanding is that it will be necessary for this excess drainage to be channelled through our property requiring in due course appropriate compensation to us.

Yours faithfully

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DIR of PLANNING
DIR of INFRASTRUCTURE
DIR of COMMUNITY
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24 November 2009

Chief Executive Officer Shire of Denmark South West Highway Denmark WA 6333

Dear Sir

#### Re: Amendment 119

I wish to object to Amendment 119 on the following grounds: -

- 1. The document states (P5)
  - "Storm water drainage can be accommodated on site"
  - 1.1 No data exists to support this comment
  - 1.2 It is very unlikely this will can occur
  - 1.3 No water management plan is available
  - 1.4 An increased risk of flooding of my property exists
  - 1.5 No post and pre flows data exist for the site, as such the comment is invalid
  - 1.6 Drainage information does not state 1:100yrs or 1:10yrs flood occurrence....flooding will occur
  - 1.7 A serious risk exists to property and land values outside the proposed rezoning due to surface run off
  - 1.8 A serious lack of drainage information exists exposing the council to risk of compensation and or correcting the drainage problems in the future
  - 1.9 The statement in the report "the land...... can accommodate stormwater drainage on site" P6, is questionable and unlikely to be untrue for the above reasons .
  - 1.10 P141 LPS states "site drainage to the Denmark River immediately to the east"

This statement implies water will be transferred overland/piped across my property or my neighbours and I object to my property being used for drainage purposes. This contradicts the statement "all drainage to be contained on site" P5, and 6.

1.11 A serious risk exists to my property from this amendment and as such the drainage issues need to be resolved in detail prior to rezoning/gazettal

1.12 I reserve the right to claim compensation from Shire of Denmark and land owners should this amendment proceed and my property is injuriously affected.

2. The landscape buffers along Scotsdale Road (non existent) should be at least 10m, required for visual amenity reasons. Scotsdale Rd is a "Scenic Route" and the subject land is extremely exposed.

3. The plan lacks any community facilities.

4. The drainage needs to be resolved immediately otherwise the Shire will be exposed to compensation and/or expensive works at a later date to correct the situation.

Yours sincerely

V'ac in

Chief Executive Officer Shire of Denmark South Coast Highway Denmark WA 6333 Shire of Denmark

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Dear Sir,

Re: Shire of Denmark Town Planning Scheme No. 3 - Amendment No. 119

Thankyou for your invitation to comment on the above proposal.

I would like to state from the outset that we are not against the sub-division of Lot 372 Horsley Rd and Lot 51 Scotsdale Rd into residential lots and welcome any sustainable development of our beautiful town.

I do not agree however, with the proposed R20 density code. Block sizes of @400sq.m represent high-density living in a town that boasts an open country lifestyle. A development of this nature would destroy the very reason people want to live here. You only have to look at the mistakes being made with the sub-divisions in Dunsborough, Streaky Bay & Margaret River, all of which are unpopular with local residents and visitors alike.

High-density living has a well-documented history of un-savory social ramifications that could easily be avoided with lower density housing.

I believe that an R5 to R10 density code is more appropriate to the culture of Denmark. Quarter to half acre blocks also provide future generations the opportunity of wealth generational opportunities should the need for future sub-division be required.

I welcome your feedback.

Chief Executive Officer Shire of Denmark South Coast Highway Denmark WA 6333

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Chief Executive Officer Shire of Denmark South Coast Highway Denmark WA 6333 Shire of DelMics...

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Chief Executive Officer Shire of Denmark South Coast Highway Denmark WA 6333 Shire of Dermark

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