

1. POLICY OBJECTIVES

The objectives of this policy are to:

- a) Provide a framework to support implementation of the Rural Economic Living Area (RELA) identified by the Jandakot Structure Plan and the Oakford Rural Village identified within the Shire of Serpentine Jarrahdale Rural Strategy.
- b) Provide a framework to explore opportunities for innovation in the development of a rural village and economic living area in the Oakford locality, and
- c) Provide guidance for the sequencing of planning and outlining matters to be addressed in planning for the Oakford Rural Village and RELA.
- d) To provide clarity and certainty to applicants, landowners, the broader community and Council with regard to Oakford, whilst ensuring a level of flexibility and providing a framework to respond to changes in strategic direction.

2. BACKGROUND AND APPLICATION

A rural style of living is the essence of the Shire of Serpentine Jarrahdale and highly valued by the existing community. In this context the Shire of Serpentine Jarrahdale Rural Strategy (the Rural Strategy) foreshadows a rural village at Oakford, with the Jandakot Structure Plan identifying a 'Rural Economic Living Area' (RELA) in the surrounding locale.

The Jandakot Structure Plan, adopted by the Western Australian Planning Commission (WAPC), identified a 'RELA' within the Oakford locale. The RELA identifies a potential expansion of 'rural living' areas, but with a strong association with rural economic enterprises in recognition of the value of agricultural production in proximity to Perth, and the need to protect rural industry from small rural subdivision.

Within the RELA, the Rural Strategy envisages a rural village at Oakford forming part of a future settlement pattern that concentrates development in identified nodes as a means to avoid a loss of rural character by avoiding a rolling urban front in the Shire.

A rural village at Oakford would have limited population capacity being surrounded by rural land, but would form a much needed focus for the RELA, including for the marketing of local produce and to provide a community heart.

This policy has been prepared to provide the framework for the implementation of the Oakford Rural Village and RELA. The policy clearly articulates:

1. Strategic and statutory planning requirements and supporting information required for development of a RELA and rural village in the Oakford locality.
2. Planning objectives to inform and guide future planning of a RELA and rural village in the Oakford locality.

The policy does not present or confirm any spatial concepts for the development of the RELA or rural village at Oakford, which will be developed through local structure plans prepared in consultation with the community and relevant state agencies. The Policy does however provide envisaged planning objectives for identified precincts within the Oakford site.

Contact Us

Enquiries

Call: (08) 9526 1111

Fax: (08) 9525 5441

Email: info@sjshire.wa.gov.au

In Person

Shire of Serpentine Jarrahdale

6 Paterson Street, Mundijong WA 6123

Open Monday to Friday 8.30am-5pm (closed public holidays)



www.sjshire.wa.gov.au



The policy is to be considered by applicants and Council in the design, assessment, and consideration/determination of:

- Regional and local scheme amendments.
- Structure plans.
- Local development plans.
- Subdivision applications.
- Applications for approval to commence development.

within the Oakford RELA as defined by Map 1. The RELA is consistent with the Jandakot Structure Plan. Any proposed expansions to the RELA area identified on Map 1 can be considered, but will need to be appropriately justified in the context of Shire and State-level strategic planning for Oakford and will need to demonstrate integration and coordination with the entire Oakford RELA. In considering alternative proposals, the Shire may first require the applicant to prepare and submit a modified Local Planning Policy No 51 for the purposes of Council consideration and public and agency consultation.

3. STATUS

3.1. Relationship to State Planning Framework

This policy has due regard to, and should be read in conjunction with, the State Planning Policy Framework. Of particular relevance are:

- Directions 2031 and Beyond – Spatial Framework for Perth and Peel.
- Outer Metropolitan Perth and Peel Sub-Regional Strategy.
- State Planning Policy No 2.5: Rural Planning.
- State Planning Policy No 3.0: Urban Growth and Settlement.
- State Planning Policy No 2.0: Environment and Natural Resources.
- Jandakot Structure Plan.

3.2. Relationship to Local Planning Policy

This policy has due regard to, and should be read in conjunction with, the Shire's Local Planning Policy suite. Of particular relevance are:

- LPP2.4 Water Sensitive Design.
- LPP2.7 Biodiversity Planning.

4. INTERPRETATIONS

Unless otherwise specifically outlined in this section, all terminology shall have the same meaning as provided within the Scheme.



5. POLICY PROVISIONS

5.1. Oakford Precincts

5.1.1. Map 1 defines the five planning precincts for the Oakford RELA, being:

- (a) Precinct 1 - Business Area.
- (b) Precinct 2 - Rural Village.
- (c) Precincts 3, 4 and 5 – RELA.

A vision and related planning objectives are identified for each precinct to guide detailed investigations and planning and provide a level of certainty and clarity to applicants and Council. The precinct vision and objectives will be given due regard by Council when considering planning proposals. Planning proposals which do not adhere to the specified precinct vision and objectives may be considered, but will need to be appropriately justified in the context of Shire and State-level strategic planning for Oakford and will need to demonstrate integration and coordination with the entire Oakford RELA. In considering alternative proposals, the Shire may first require the applicant to prepare and submit a modified Local Planning Policy No 51 for the purposes of Council consideration and public and agency consultation.

Precinct 1 – Business Area

5.1.2. Planning for precinct one shall be consistent with the vision of providing local services for the Oakford Rural Village.

5.1.3. Planning objectives for precinct one include:

- a) To provide locally based opportunities for rural industries.

Precinct 2 – Rural Village

5.1.4. Planning for precinct two shall be consistent with the vision of providing a sustainable rural village that protects rural character, function, and amenity by concentrating urban development within a village node characterised by a small area and higher density.

5.1.5. Planning objectives for the rural village are to:

- a) Maintain a rural lifestyle and character within a rural village of higher densities and services.
- b) Offer a rural lifestyle to residents in close proximity to activity centres.
- c) Provide a community focus for the surrounding RELA.
- d) Serve as a market for local agricultural products.
- e) Be a demonstration model for sustainable development, incorporating best management practices under the auspices of reduced energy consumption through renewable power generation, waste and integrated water management.

5.1.6. Schedule 2 provides a description of an indicative concept for a rural village; this description does not form part of the provisions of this policy and should not be viewed as the final development outcome for Oakford.



Precincts 3 to 5 – Rural Economic Living Area

- 5.1.7. Planning for precincts three, four and five shall be consistent with the vision of providing the environment for locally based rural living partly or fully sustained by rural production.
- 5.1.8. The planning objectives for precincts three, four and five are:
- a) To achieve greater employment in rural industries and enterprises.
 - b) To facilitate rural subdivision only where associated with rural economic enterprises.
 - c) To encourage greater food production in Oakford and complement existing nursery and equine industries.
 - d) To promote reliable, recycled water sources and target more intensive and high value crop developments.

Land Not Within a Precinct

- 5.1.9. There are some parts of the Oakford RELA which are not within a designated precinct. Planning applications for these areas will be determined in accordance with the Shire's Local Planning Scheme No.3, relevant Policies and the Shire and State strategic-planning framework. It is considered that no further detailed planning is required for these smaller lots at this point in time.

5.2. Scheme Amendments

- 5.2.1. Where a landowner, group of landowners, or their appointed representatives seek to initiate an amendment to the Metropolitan Region Scheme or the Shire's Local Planning Scheme for any precinct within the Oakford RELA, then those persons must provide the necessary information and undertake the relevant tasks identified under Column A of Schedule 1. This must occur before the Shire will consider initiating the Local Planning Scheme Amendment or requesting the WAPC to initiate an Amendment to the Metropolitan Region Scheme.
- 5.2.2. Council shall not initiate a scheme amendment for any geographical area smaller than those precincts depicted on Map 1, unless specifically resolved otherwise.

5.3. Local Structure Plans (LSP)

- 5.3.1. Where a landowner, group of landowners, or their appointed representatives seek to develop a LSP for any precinct within the Oakford RELA, then those persons must provide the necessary information and undertake the relevant tasks identified under Column B of Schedule 1. This must occur before the Council will consider assessing the LSP.
- 5.3.2. Where a LSP is proposed prior to finalisation of an amendment to the Scheme for a precinct, then the necessary information and relevant tasks identified under Column A of Schedule 1 shall be required in addition to the requirements of 5.3.1 above.
- 5.3.3. Council shall not support a LSP for any area geographically smaller than those precincts depicted on Map 1, unless specifically resolved otherwise by Council. Where a LSP does not cover the entire Oakford RELA area, it is to be supported by a broad concept plan demonstrating how the LSP will integrate with the remainder of the Oakford RELA adhering to the planning visions and objectives detailed in provision 5 of this Policy.

5.4. Local Development Plans (LDP)

- 5.4.1. Where a landowner, group of landowners, or their appointed representatives seek to develop a LDP for any precinct within the Oakford RELA, then those persons must provide the necessary information and undertake the relevant tasks identified under Column C of Schedule 1 before the Shire will consider assessing the LDP.



5.4.2. LDPs shall be prepared for those areas defined by an approved LSP.

5.4.3. Council shall not support a LDP in the absence of an approved LSP adopted pursuant to Part 4 of the Deemed Provisions of the Scheme.

5.5. Subdivision

5.5.1. Where a landowner, group of landowners, or their appointed representatives seek to apply for subdivision within any precinct within the Oakford RELA, then those persons must provide the necessary information and undertake the relevant tasks identified under Column D of Schedule 1 before the Shire will consider supporting such an application.

5.5.2. Subdivision applications shall be prepared for those geographical areas defined by an approved LSP.

5.5.3. Council shall not support an application for subdivision in the absence of an approved LSP adopted pursuant to Part 4 of the Deemed Provisions of the Scheme.

5.6. Development Applications

5.6.1. Except as provided for in Local Planning Scheme No.3 or sub-clauses 5.6.2 and 5.6.3 of this Policy, no new development or use of land shall be commenced or carried out within Precinct 2 (Rural Village) as defined by Map 1 until a LSP has been approved for the relevant precinct.

5.6.2. Development of a single house on a lot within Precinct 2 (Rural Village) prior to the approval of a LSP is permitted subject to the Council being satisfied that such development will not have an adverse effect on:

- (a) The preparation of a LSP for the relevant precinct.
- (b) The orderly and proper planning of the relevant precinct.

5.6.3. Council may approve development or use for other than a single house within the Precinct 2 (Rural Village) prior to the approval of a LSP subject to Council being satisfied that the nature and scale of such development or use will not have an adverse effect on:

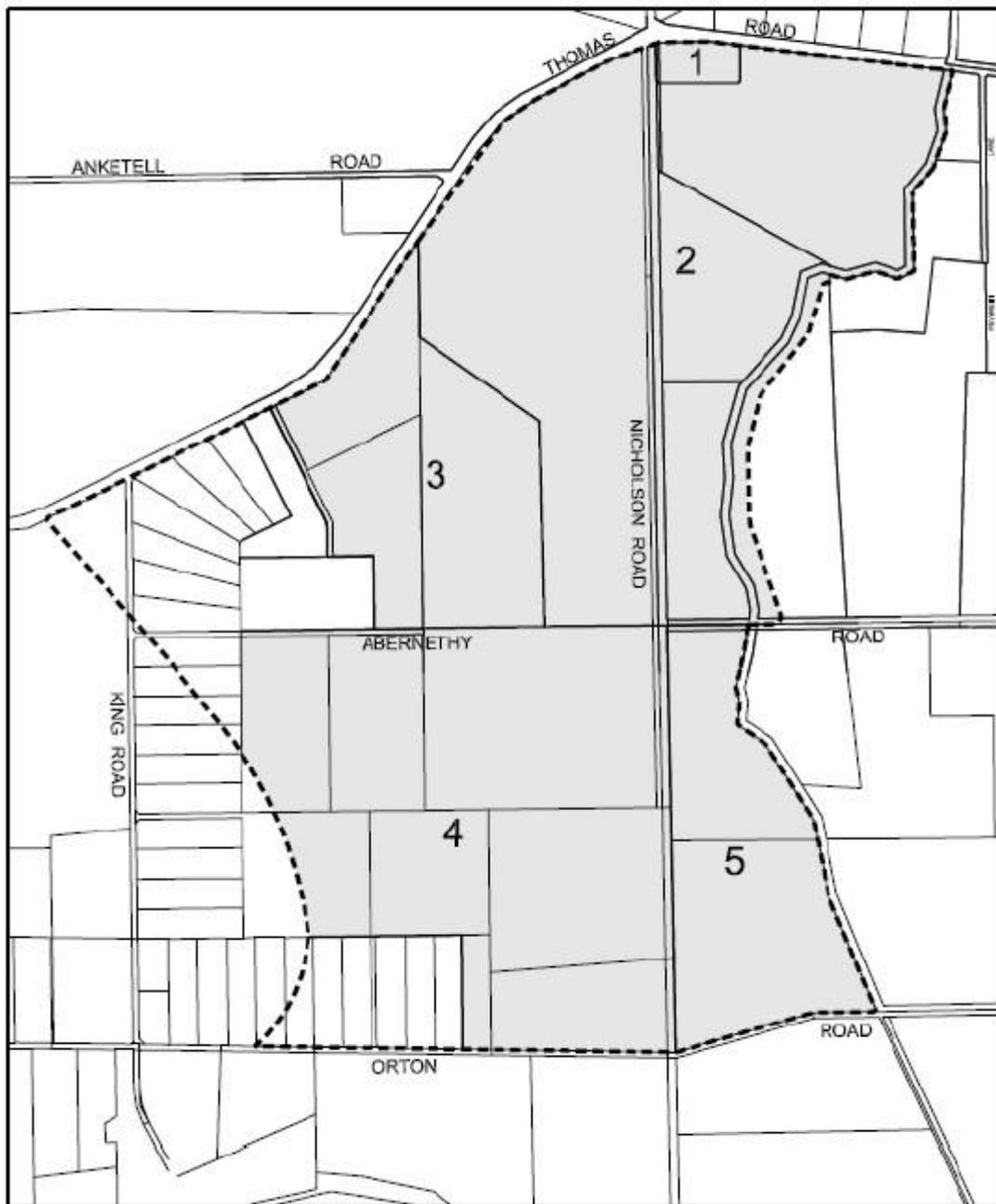
- a) The preparation of a LSP for the relevant precinct.
- b) The orderly and proper planning of the relevant precinct.
- c) The health, amenity, safety or convenience of the future occupants on the relevant precinct.

5.6.4. Where a landowner, group of landowners, or their appointed representatives seek to apply for development in accordance with an approved LSP within Precinct 2 (Rural Village), then those persons must provide the necessary information and undertake the relevant tasks identified under Column E of Schedule 1 before the Shire will consider approving such development.

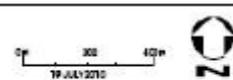
5.7. Stakeholder Engagement

5.7.1. All scheme amendments and LSPs shall be advertised to the local community in accordance with the requirements set out in the Scheme and Policy.

5.7.2. The Shire may seek advice from third parties, such as relevant State Government agencies, in determining whether information and/or tasks as per Schedule 1 have been satisfactorily completed.



POLICY AREA AND PRECINCTS



MAP 1 – POLICY AREA AND PRECINCTS

SCHEDULE 1 – OAKFORD RURAL ECONOMIC LIVING AREA PLANNING FRAMEWORK

The following table outlines the planning information that is required to be provided and matters that are required to be addressed for all planning stages for the Oakford RELA. It should be noted that the Shire may require the provision of information of undertaking of tasks in addition to those specified within following table as it deems necessary and reasonable.

- Issue to be flagged with a strategy for later resolution / indicative information required
- Issue to be resolved / detailed information required

Information Required	Planning Proposal				
	A MRS Amendment/ TPS Amendment	B Local Structure Plan	C Detailed Area Plan	D Subdivision	E Application for Approval to Commence Development
Site and context analysis					
Context analysis	○	●	●	●	●
Site analysis	○	●	●	●	●
Specific topographic features	○	●	●	●	●
View corridors	○	●	●	●	●
Impacting land uses/activities and buffer requirements ¹	○	●	●	●	●
Environmental analysis and management					
Flora survey ²	●	●			
Landscaping and Vegetation Retention Management Plan	○	●		●	●
Fauna survey ³	●	●			
Fauna management plan	○	●			
Features of cultural heritage significance (eg. heritage areas, sites or buildings)	○	●			
Acid sulphate soils assessment ⁴	○			●	●
Acid Sulphate Soil Management Plan	○	○		●	●
Birrega Brook Management Plan	○	●			
Planning context					
Region scheme	●	●	●	●	●

¹ To include aircraft, quarries, UXO, kennels, midge/mosquitoes, market gardens, poultry farms, industrial activities, fire hazards, flooding and/or inundation.

² A Level 1 Flora Survey is required to support a Scheme Amendment, and Level 2 Flora Survey required to support a Local Structure Plan, in accordance with EPA Guidance Statement No. 51.

³ A Level 1 Fauna Survey is required to support a Scheme Amendment, and Level 2 Fauna Survey required to support a Local Structure Plan, in accordance with EPA Guidance Statement No. 51.

⁴ An Acid Sulphate Soils preliminary assessment in accordance with Planning Bulletin 64 is required to support a Scheme Amendment, and detailed site assessment to support subdivision and development applications, if required by results of preliminary assessment.

Information Required	Planning Proposal				
	A MRS Amendment/ TPS Amendment	B Local Structure Plan	C Detailed Area Plan	D Subdivision	E Application for Approval to Commence Development
Regional planning strategies/structure plans	●	●	●	●	●
Town planning schemes	●	●	●	●	●
Other local structure plans and planning decisions	●	●	●	●	●
Engineering and Servicing					
Engineering and Servicing Report	○	●			
Engineering and Servicing Strategy ⁵	○	●			
Geotechnical Investigations ⁶	●	●		●	●
Earthworks strategy ⁷	○	●		●	●
Community Design					
Define sense of place and/or identity of village	○	●	●		
Design response to site and context analysis	○	●	●		●
Land use distribution and rationale	○	●	●		
Design objectives	○	●	●		
Density targets	○	●			
Crime prevention	○	●	●		●
Design for better health	○	●	●		
Housing diversity	○	●			
Townscape character and streetscape	○	●	●		
Energy efficiency	○	●	●		●
Community farming	○	●			
Emergency management and risk assessment	○	●			●
Local community facilities plan ⁸	○	●			
Activity Centres and Employment					
Activity centre analysis/employment strategy ⁹	●	●			

⁵ To include power, gas pipelines, and/or easements, and telecommunications infrastructure.

⁶ A preliminary geotechnical investigation is required to support scheme amendments, with detailed investigations at the time of local structure plans.

⁷ To consider retention of natural landform, and sources of sand supplies for groundwater clearance. Impact to adjoining roads and infrastructure to be considered in detail.

⁸ To identify requirements for community facilities for the Oakford REA area in accordance with the Shire of Serpentine Jarrahdale Community Facilities and Services Plan and Disability Access and Inclusion Plan.

⁹ To consider type of centres and the relationship between Oakford and other nearby economic centres, employment rates and opportunities (provision, extent, type, location, sources and/or localities other than structure plan area of employment for the future population), and land use distribution (e.g. retail, mixed use, commercial, educational institutions, government, civic, entertainment, home-based business, business).

Information Required	Planning Proposal				
	A MRS Amendment/ TPS Amendment	B Local Structure Plan	C Detailed Area Plan	D Subdivision	E Application for Approval to Commence Development
Vocational Education plan ¹⁰	○	●			
Lot Layout					
Lot size and variety	○	○	●	●	
Proposed land use description	●	●	●	●	●
Retention of existing vegetation;	○	○	●	●	●
Minimise effects on local and/or nearby amenity;	○	○	●	●	●
Climate-responsive design – lot orientation	○	○	●	●	●
Street cross-sections traffic management	○	○	●	●	
Clear network based on function, traffic volumes, vehicle speed, type, public safety and amenity	○	○	●	●	
Building Design					
Building Design Guidelines	○	○	●	●	
Building Heights	○	○	●		●
Setbacks	○	○	●		●
Public Parkland					
Public open space schedule	○	●		●	
Landscaping master plan	○	○		●	●
Ongoing management arrangements and responsibilities	○	○		●	
Schools					
Catchment requirements	●				
Size and distribution of school sites	○	●			
Site analysis and design	○	○	●		
School site detailed area plan	○		●		
Traffic Management					
Regional Traffic Study ¹¹	●*				

¹⁰ To include such vocational education institutions as community gardens, men in sheds, women in sheds, and junk busters.

* These items may require lengthy and ongoing negotiations. Provided Council is satisfied that they are sufficiently advanced to enable the amendment to be initiated these items may be commenced with applications and finalised prior to final approval of the relevant planning stage.

¹¹ To be prepared in conjunction with Main Roads Western Australia, Department of Transport, Department of Planning, and Serpentine Jarrahdale Shire. The study and report must be regionally focussed in determining access points, regional impacts, and future road hierarchy. The report should be based on population generation and future development locally and regionally and with the traffic generation based on accurate, current data. To include regional modelling of the surrounding road network and projected growth.

Information Required	Planning Proposal				
	A MRS Amendment/ TPS Amendment	B Local Structure Plan	C Detailed Area Plan	D Subdivision	E Application for Approval to Commence Development
Regional public transport strategy ¹²	●*				
Local public transport strategy ¹³	○	●			
Traffic volumes and street hierarchy	○	●	●		
Intersection treatments	○	○		●	●
Transport noise assessment	○	●	●	●	●
Vehicular Access and Parking Strategy ¹⁴	○	○	●		●
Local pedestrian, cycle and disabled movement networks.	○	○	●	●	●
Accessibility to public open spaces, shops, bus stops, primary schools, transit station	○	○	●	●	
Stormwater Management					
District Water Management Strategy ¹⁵	●*				
Local Water Management Strategy ¹⁵	○	●			
Wastewater re-use management plan ¹⁵	○	●			
Urban Water Management Plan ¹⁵		○		●	●
Sustainability					
Sustainability Principles and Objectives Statement	●	●			
Structure Plan Design Assessment Report	○	●			
Solar Efficiency/Water Sensitive Design Guidelines	○	●			
Cost Sharing Arrangements					
Developer Contribution Plan/Arrangement (District Level)	○	●			
Developer Contribution Plan/Arrangement (Precinct Level)	○	●			

¹² To include consideration of infrastructure location, type of facilities, scale of facilities, connections to the road, cycle and pedestrian networks, integration with the surrounding urban form, and interim arrangements and staging plan for infrastructure development and surrounding urban form in consultation with the Public Transport Authority.

¹³ To include existing and future network for structure plan areas providing adequate road standard for public transport operations (on the advice of the Public Transport Authority – that demonstrates consistency with local structure plans areas).

¹⁴ All proposed access points to developments must have approval from Main Roads Western Australia and Serpentine-Jarrahdale Shire.

¹⁵ To be prepared in consultation with the Department of Water, Water Corporation, and Serpentine-Jarrahdale Shire, in accordance with *Better Urban Water Management* and other related guidance documents produced by the Department of Water.

Information Required	Planning Proposal				
	A MRS Amendment/ TPS Amendment	B Local Structure Plan	C Detailed Area Plan	D Subdivision	E Application for Approval to Commence Development
Tenure and Management Arrangements		○		●	

* These items may require lengthy and ongoing negotiations. Provided Council and the relevant State Government agency are satisfied that they are sufficiently advanced to enable the amendment to be initiated these items may be commenced with applications and finalised prior to final approval of the relevant planning stage.

SCHEDULE 2 – DESCRIPTION OF INDICATIVE CONCEPT FOR RURAL VILLAGE PRECINCT

A Sustainable Village

One of the principal drivers for the Oakford Rural Village is that it can be a successful working model of an ecologically sustainable development.

Energy conservation and recycling features include:

- Use of urban by-products for rural production/use of rural products for urban consumption
- A critical mass of development to support waste water/recycling
- Efficient use of energy
- Housing design – solar orientation
- Transport savings
- Local employment synergies
- Water saving devices

The Village would be committed to “closing the loop” in terms of energy, water, waste recycling and reducing its overall ecological footprint. The benefits in terms of water, energy and waste recycling, as well as the provision of social and economic infrastructure means that the Rural Economic Living Area will benefit from a small-scale residential node.

Excess energy generated within the Oakford Rural Village could be sold to the regional grid to reduce overall greenhouse gas emissions for the village. Further, water and waste in this instance becomes part of a local re-cycling process rather than a regional disposal process – which is efficient and sustainable.

Thus, the supply of local water and waste contributes to local economic development through the improvement in land capability and product yield for individual farmers and the benefits of such a model can be extended into existing centres such as Byford, Mundijong and Armadale.

The preliminary estimates to facilitate the above strategy suggest the proposed Oakford Rural Village would need to have in the order of 2000-2500 lots (some 6000-7000 people) to generate a critical mass for sustainability initiatives.

Maintaining Rural Identity

As a new settlement outside of frontal development the planning of the Oakford Rural Village has required a new approach and a different design solution to that which may have applied to the expansion of an existing town or for infill development.

A preliminary concept plan has been prepared, which incorporates the following:

- Village Development sympathetic to and subservient to rural catchment
- No dwelling more than 800 - 1000 metres from the rural hinterland
- No dwelling more than 500 metres from the village centre
- Green spaces and links to accommodate water sensitive urban stormwater management
- Dual Use and Bridle Trail network
- Visual axis to rural hinterland and green spaces
- Village entry points and road framework to promote easy access to transport routes

Village Centre

The village centre is located between two main north-south roads being Nicholson Road and an extension to Anketell Road and the major east-west road link.

A substantial village square is envisaged for the village centre which is intended to provide a focus for community activity and continue the theme of a rural lifestyle. The village square provides gathering space with market pavilions and community facilities, in a parkland setting. Commercial areas, higher density residential areas and the school are all focused on the square.

Design guidelines will apply to the village centre.

The village centre will incorporate the following:

- Market square
- Mixed/home business
- High density small cottage lots (2 storey and loft), to reinforce village/local centres
- Some facing green spines with pedestrian only access
- Community facilities
- School
- Retirement village
- Recreation area
- Oakford Voluntary Bushfire Brigade

Village Employment

A business area is proposed facing Thomas Road between Nicholson Road and the eastern entry road. This will replace the current roadhouse and former service station site, and will provide an opportunity for a first stage development with associated workforce to service passing traffic for the increasing vehicular traffic between South Western Highway, Kwinana Freeway and the major industrial areas of Kwinana and Henderson.

Village Residential

To ensure a compact village and in order to achieve sustainability objectives, a range of residential densities are proposed within the Oakford Rural Village. The highest of these will be around the village centre to create a compact village centre. Additional residential densities around the village centre are raised to reduce spatial take of land for the built form. No R Codes are proposed to ensure the retention of a 'rural' feel.

Four main zones are proposed. These are;

- the village core – density equivalent to 40 to 80 dwellings/ha with small setbacks, to provide a clustered and compact development around the village centre;
- village residential – primarily to the north of the village centre and typically 10 – 20 dwellings/ha with medium density nodes up to the equivalent of 40 dwellings/ha
- rural living – divided into two sub-zones; the first being the village outskirts, which will range between 1000m² - 5000m²; the second ranges between 2000m² - 5000m² each with clusters of up to 40 dwellings/ha in selected locations such as local centres and activity areas; and
- rural hinterland – providing the primary catchment for the agri-business support for the village.

The absence of R Codes allows for the development of pockets of medium and higher density development surrounded by low and semi-rural development. The gradual transition to lower densities on the periphery of the village will help generate a more measured village – rural transition. The consolidation of residential uses allows a concentrated source of the generation of renewable energy, water and waste for farming. This compares favourably to the traditional planning regime of having large lot rural (min 2ha) development with no real connection to the wider rural community.

It is expected that a combination of residential, special residential, cottage and rural living lots will result in an average housing yield of 15 dwellings/hectare.

The main features are:

- Density decreasing outwards from village/local centres to rural hinterland
- Predominantly residential lots to the north (higher land)
- Predominantly rural-residential lots to the south (lower land)
- No blanket R codes densities – rather clusters of small lots at strategic locations mixed in with larger lots (Alternative to special rural)
- Transition from predominantly residential lots to the north to predominantly rural to the south
- Dual use paths north of the village centre
- Bridle trails to the south of the village centre

Public Open Space, Rural Links and Movement Network

In the Oakford Rural Village design concept, open space parkways are to be connected to corridors of parkland which run through the village and provide diverse functional areas of public open space. In

particular tree corridors along Nicholson Road, the extension to Anketell Road and an extension to the existing avenue of trees to the old homestead are envisaged.

The corridors converge onto the village centre and provide view lines onto this communal recreational space and outwards to the rural surrounds. The public parkland includes a central park as part of the village square, and a recreation sports centre designed to service the local community. The parkland corridors also provide a landscaped buffer between the village residential areas and Thomas Road.

More active recreational activities are provided for with a full sized playing oval, tennis courts and netball courts located close to the village centre. The corridors of parkland will also serve the purpose of rehabilitating unattractive and environmentally unsound drainage systems. These revitalized waterways will help improve the surrounding environment.

It is proposed that a landscaping theme be developed for each of these areas with landscaping of the residential road verges, the village centre and the developed areas north of the village centre to complement a predominantly residential environment, whereas in the public open space and south of the village centre, the emphasis will be on native vegetation.

The green corridors and the compact design of the village will encourage alternative transport options such as walking, cycling and horse-riding when travelling within the village.

Advanced designs have been prepared for the Thomas Road and Nicholson Road intersection in consultation with Main Roads Western Australia (MRWA) and the Shire.

Birrega Brook shall be modified to enhance environmental values in the waterways by channel realignments, channel profile modifications, introduction of low-flow channel, riffles, and riparian and in-stream vegetation.

Environmental Management

The village design incorporates a number of environmental improvement opportunities which include:

- efficient use of land resources – integration of residential/rural
- nutrient management – Peel Harvey Catchment (rural areas)
- water sensitive storm water management (residential areas)
- tree planting/landscaping
- groundwater monitoring
- development footprint defined resulting in;
 - minimal change to existing surface
 - smaller village lots on higher land
 - larger rural lots on lower land
 - minimal retaining necessary