



structure plan report - P11002

Prepared for LandCorp Shire of Jerramungup March 2012

bremer bay town centre





prepared in conjunction with

donaldson+warn









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ATTACHMENT 1 - Retail Demand Analysis
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1.0 INTRODUCTION

OVERVIEW

This Structure Plan report has been prepared by Cardno in collaboration with Donaldson+Warn Architects , Taktics4, Strategen and Porter Consulting Engineers on behalf of LandCorp and the Shire of Jerramungup.

The Plan provides strategic direction for the future development of the new Bremer Bay Town Centre and has involved an integrated process of investigation, consultation and collaboration. The method used for preparing the Structure Plan involved comprehensive analysis and site investigations by the project team, comprising land use planners, landscape architects, architects, environmental consultants, engineering consultants and a retail consultant.

BACKGROUND

Bremer Bay is located on the south coast, approximately 180km east of Albany. Bremer Bay is a beautiful coastal town that offers numerous recreational pursuits for residents and visitors. The town has a primary school, general store, resource centre, health centre and a sports club/golf course, FESA facilities with several businesses also operating along Gnombup Terrace. Visitors are accommodated in the two caravan parks and the Bremer Bay Resort. To the east of Bremer Bay is the Fitzgerald River National Park which contains 20% (1,800 species) of the state's described plant species and is one of the most diverse botanical regions in the world.

Although Bremer Bay is a relatively small town comprising approximately 210 permanent residents, the town experiences a significant influx of tourist during the holiday periods. Figures recorded by the Council indicate the total number of occupancies in the caravan parks and camping grounds exceed 20,000 per month.

There have been a number of scheme amendments over the last few years for new small scale rural residential areas near Point Henry, a new planned Industrial zone to the west of Bremer Bay and the recent subdivision and construction of residential land immediately west of the proposed Bremer Bay Town Centre.

The main industries for residents include agriculture, fishing and tourism. The potential development of the Southdown magnetite mineral deposit (near Wellstead), 90km to the west of Bremer Bay, has the potential to substantially increase the resident population of Bremer Bay and provide an alternate location for mine workers, by offering a different lifestyle and recreations opportunities to the regional centre of Albany.

In December 2008, the Elected Members and Executive Team of the Shire of Jerramungup prepared a strategic plan for the period of 2009-2014. Part of the strategic planning process identified the development of the Bremer Bay Town Centre as a key strategic project for the Shire.

The planning and development of a town centre for Bremer Bay has been discussed for several years and has been identified as a driver in terms of supporting and encouraging growth from a population and economic perspective, in particular providing appropriately zoned land to facilitate commercial development to enhance business and employment opportunities and providing existing and future residents with an improved level of amenity, choice and convenience.

To progress the future planning for the Town Centre, a Structure Plan was originally prepared in 2010. The plan was submitted to referral agencies for public comment and placed on public notification. Several submissions were received and it was noted that the plan needed refinement.

In 2011, a consultant team was appointed by LandCorp on behalf of the Shire of Jerramungup. The team comprised town planners, landscape architects, architects, an engineer, environmental consultants and a retail consultant which revisited the work completed in 2010 and re-examined the community and referral agency comments raised during earlier consultation regarding the issues, opportunities and constraints facing the development of the town centre. In particular, the following key aspects were identified:

- Providing facilities that complement and reinforce the service function of the town and ensuring the scale and types of activities are commensurate with the existing and future population;
- The land earmarked for the town centre contains a significant number of signature species found in the Fitzgerald River National Park. With careful design and planning the botanical story can be brought into the foreground or 'front yard' of the town centre development;
- Opportunity for the design of the town centre to capitalise on views and relate to the topography of the site and the greater landscape;
- Opportunity to strengthen road connections between new and existing development and create a sense of arrival to Bremer Bay; and
- Opportunity for the town centre to rationalise parking and improve accessibility (i.e. provide for cars with caravans).

PREVIOUS PLANS

In 2010, Gray and Lewis Consultants were commissioned by the Shire of Jerramungup to prepare a Structure Plan which formed the starting point for Council and community input into the future planning for the Bremer Bay Town Centre to enable discussion, debate and refinement of the uses for this area.

The 2010 Structure Plan was intended as a working document requiring input from the Council, community and key stakeholders. The Structure Plan and two development concepts prepared by Gray and Lewis were advertised and a total of 33 submissions were received from the local community, key stakeholders and referral agencies. The main areas addressed in the submissions were identified as follows:

- Several submissions considered the designs ignored the site contours, the
 presence of sensitive and important vegetation and the possibility of achieving a
 'sense of arrival'.
- There was strong support for the retention of the remnant vegetation located on the eastern portion of the Reserve which many submitters felt was not adequately addressed in the designs prepared. Several submissions recommended appropriate areas of remnant vegetation be incorporated within the development as an integral part for environmental, aesthetic, quality and commercial reasons and as a reflection of Bremer Bay's part in the Fitzgerald Biosphere.
- Several submissions strongly encouraged sensitive and sustainable environmental design and integrated management systems.
- The design options proposed commercial floorsapce that was considered not commensurate with the existing and future population.
- Bremer Bay townsite is located at a pinch point in the wider vegetation
 macro-corridors The subject site provides a key linkage between Reserve 511
 and the Unallocated Crown Land to the north of the Primary School. Current
 environmental studies fail to consider the regional values of the vegetation on
 site. Recommendation that at least some of the remnant vegetation be retained
 with a maximum width to limit 'edge effects'.
- The development concepts should give consideration to the town centre plan
 extending to Gnombup Terrace to the south as a way of Integrating the existing
 land uses into the concept plan, providing greater connectivity between north
 and south of Borden- Bremer Bay Road, and as a mechanism to integrate and
 upgrade the existing Gnombup Terrace verges and streetscape.
- Several submissions questioned the appropriateness of the proposed R30 lots with rear laneway access.

DESIGN PROCESS AND APPROACH

The design team as part of the analysis and background investigation phase of this project undertook extensive review of the 2010 Structure Plan, supporting background reports and submissions received during the consultation period. The consultant team also undertook several site visits to familiarise themselves with the subject site and test subsequent design options prepared for the new Town Centre. An informal community consultation forum was held in April 2011 to discuss the project with the community and garner ideas and feedback prior to developing and refining options for the site.

This Structure Plan was also informed by the preparation of a retail demand strategy prepared by Taktics4 which assessed the retail potential in Bremer Bay under a range of potential growth scenarios and commercial influences and economic implications of creating a town centre in Bremer Bay. The findings and recommendations of this analysis was used to underpin some of the recommendations made regarding the location of the retail core and size of the retail and commercial floorspace.

During the design phase of this project, several options were prepared for the subject site taking into consideration the site's opportunities and constraints (environmental, engineering, topography and views etc), project objectives as discussed in Section 2.0 of this Report and Council aspirations. The consultant team analysed previous opportunities and constraints mapping prepared by Harley Global (Figure 1), prepared several options over the subject land and also considered the redevelopment of the area surrounding the existing general store which is currently performing a pseudo 'town centre' role.

The main design parameters investigated are discussed below. These were presented at an Elected Members Briefing Session in June 2011 and at a Community Consultation Forum in October 2011.

1.0 INTRODUCTION

DESIGN OPTION

COMMENTARY

'Main Street' fronting Borden-Bremer Bay Road This option explored the idea of integrating the 'main street' with the activities along Gnombup Terrace and utilising portion of the Borden-Bremer Bay Road reserve for development. This option was chosen for further refinement and testing in discussion with Council and key stakeholders and forms the basis of the preferred option. It was determined during the testing stage that the costs to relocate the services under the Borden-Bremer Bay Road reserve would be too cost prohibitive. The design team was asked refine this option to investigate 'stretching the main street' and front ing retail development onto Borden Bremer Bay Road as well as a new 'Main Street'. Provide space for a health campus, police station, future civic uses and visitors centre, provide a link to Gnombup Terrace to assist in consolidating the commercial spaces and highlight the existing ecological corridor and bring the natural environment into the development as an intrinsic element of the proposed Main Street.

'Main Street' adjacent Primary School Although this design had some merit with the potential to create a symbiotic relationship with the existing civic uses i.e. school and church with the possibility of generating critical mass of uses and patronage, it was considered that this option did not satisfy the overall project objectives and vision.

Reconfiguration of Mary Street around General Store and surrounds. The design team felt it warranted the review and investigation of reconfiguring the land surrounding the existing general store. It was determined during the course of discussion with Council and key stakeholders and the testing phase that this option was physically constrained and did not satisfy the overall project objectives and vision.

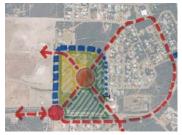
















Analysis - early diagrams exploring movement networks, nodes of activity and vegetation links

OPPORTUNITY AND CONSTRAINTS PLAN

CONSTRAINTS

Drainage

Site is split into two catchments. Clay soils making on-site disposal difficult

Drainage issues from the wider catchment affects northern part of site.

Environment

Cold south westerly winter winds & hot north easterly summer breezes Steep land in the north eastern corner Good quality vegetation on the site recognised by study Pinch point in the wider marco-corridor No declared rare flora but a Priority 2 species present Clay soils

Urban Form

Existing urban form scattered. Service Station and service commercial area in Gnombup Terrace screened by vegetation Shop, tavern and Gnombup Terrace that would normally be centrally located and form part of a 'Main Street' are spread out Town Centre site is not located central to the remainder of the existing townsite. No discernable town centre which means no place to orientate yourself as a visitor or place to go for information. No single community meeting place.

Poor quality development in Gnombup Terrace

Main services (water, power & sewer) run through Bremer Bay Road road reserve Some communications infrastructure at the northern end of the subject site

Bremer Bay Road takes traffic straight past subject site at speed.

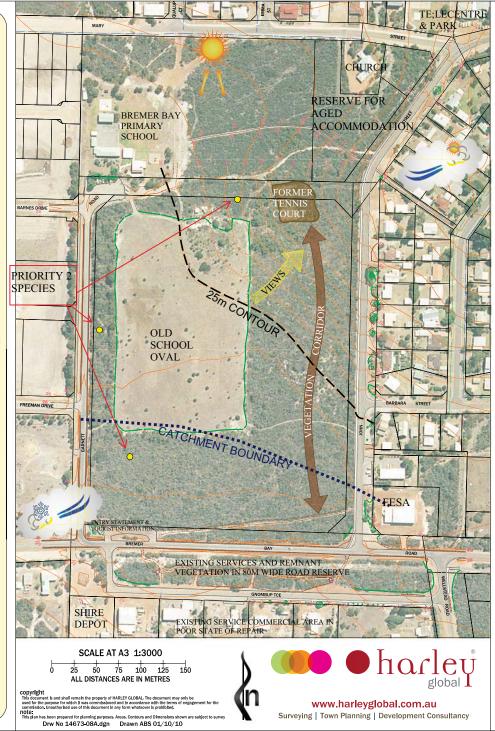
Site is blocked from the rest of town by the Primary school reserve and other adjacent reserves.

John Street-Mary Street intersection is inadequate

Traffic is drawn down past the shop to the Bennett & Mary Street intersection that is not designed for high volumes of traffic.

Scheme

Site is zoned Special Site with a limited number of land uses. Ideally a rezoning is needed to facilitate the full development of the land.



Surveying | Town Planning | Development Consultancy

OPPORTUNITIES

Views

Use topography to maximise views. No other main street in WA has access to views like Bremer Bay's. Use the slope of land, particularly the 25m contour line as this is the line where significant development has occurred elsewhere in Bremer Bay. Such as the telegraph station, Tavern and school. Use the slope to ensure the rest of town can see and therefore more strongly associate with the town centre.

Environment

Use the existing vegetation to highlight the natural environment in town for locals

Establish an ecological corridor through the site for the movement of fauna and security of flora species

Utilise vegetation as wind breaks Sandier soils in the north eastern portion of the site

The vegetation corridor has opportunities for footpath networks to link the Main Street to the rest of town. Can extend formal reserve network

through the site, securing native vegetation in perpetuity.

Urban Form

The existing development in Gnombup Terrace can contribute to the town centre. Council has control of wide road reserves and nearby reserves that may be used for drainage purposes.

Lack of aged accommodation in town, there is an opportunity to provide sites to allow the community options to age in

Investigations with education Department have provided 'in principle' agreement to change the shape of the school reserve. Greenfield site of a regular shape that offers potential for design to maximise access to winter sunlight to the north. Place to provide a terminus for the Bremer Bay to Hopetoun walk trail. tourist centre. Westrail bus terminus. weekend markets, etc

Medium Density development will offer low maintenance options to aged persons. holiday accommodation, mine workers. etc and offer another option not available in town.

Medium density development to access views to make increase viability.



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1.0 INTRODUCTION

ENVIRONMENTAL ASPECTS

Strategen has completed a preliminary Environmental Site Investigation Report (March 2012) with documents the following key findings:

Topography, geology and soils

- The development of the site is anticipated to be sewered. The site appears to be generally suitable for sewered development from a geotechnical perspective.
- The hydraulic conductivity of the local soils is poor. Infiltration on site is likely to be limited, which may be a constraint for the use of infiltration on site for stormwater management and on site disposal of wastewater. Drainage management on the site will need to consider the implications of low infiltration rates. Some forms of stormwater disposal, such as soakwells, may not be feasible or will require the installation of a sand layer to enhance infiltration. These issues will be addressed in the Local Water Management Strategy (LWMS).
- Acid sulphate soils are considered unlikely to occur on the site. No additional work is anticipated to be required to address this issue.
- It is recommended that the telecommunications facility be investigated for the
 presence of asbestos and potential sources of contamination prior to demolition.
 This should include discussions with Telstra regarding the history of the site and
 potential use or storage of contaminated materials on the site.

Surface water

No significant surface water features are located on the site. The majority of the site drains in a northeasterly direction, towards the corner of John Street and the unmade Garnett Road. The southern portion of the site drains in a southerly direction, towards Gnombup Terrace. The Bremer River is located approximately 500 m north of the site.

Flora

- The current concept for the development has been designed to keep vegetation
 clearing to the minimum required to allow construction of the town site facilities.
 New disturbance will comprise approximately 3.56 ha, including clearing
 for roads, retail and civic areas. The proposed design retains the important
 connectivity between the vegetation to the south and to the north-east of the
 site.
- Taking into consideration the likely regional distribution of vegetation types occurring in the proposal area and the relatively small area of disturbance

- required (3.56 ha), the proposal is expected to have only a local impact to the vegetation types present.
- None of the habitat types identified are listed as Threatened Ecological Communities.
- No Declared Rare Flora were recorded on site. One Priority 2 species, Chordifex ornatus, was identified on the site. Note that the Priority status does not have statutory standing. The Priority fauna classifications are used by the DEC to manage and classify their database of species considered potentially to be at risk, but these categories have no legislative status for protection.
- There are no known Environmentally Sensitive Areas present on or adjacent to the site.

Fauna

Approximately 3.56 ha of relatively disturbed fauna habitat will be cleared as part of the current development concept. The majority of the vegetation types on the site do not appear to be restricted in distribution within the Bremer Bay locality, suggesting that the fauna habitats are likewise more widely distributed. However, clearing on the site should be managed to maintain the connectivity between vegetation to the south of Borden Bremer Bay Road and north of Mary Street.

Environment Protection and Biodiversity Conservation Act 1999

Based on a search of the EPBC Act Protected Matters Search Tool, there are several threatened species potentially present on site that may be impacted as a result of development. Of the identified species, 12 species may occur on site. A targeted survey will be required to support EPBC Act referral. Before clearing occurs, it is recommended that a Level 2 fauna field survey is undertaken and targeted assessment of fauna habitat, including key plant species potentially occurring on the site area is undertaken.

Heritage

- No sites of European heritage or Aboriginal heritage significance are located on the site.
- As no surveys for Aboriginal Heritage have been conducted, there is a risk that
 works on the site may uncover a previously unknown heritage site. It is therefore
 recommended that an Aboriginal heritage survey of the site is conducted prior to
 construction.

 The former vesting of the site for recreation with the Shire of Jerramungup would in all likelihood have extinguished native title. This could be confirmed with the Department of Regional Development and Lands if required.

Conclusions and Recommendations

Environmental conditions on the site are considered to be generally suitable for development. There are no fatal flaws or major constraints to development. Issues that need to be addressed prior to development are:

- Drainage and urban water management will need to be addressed through the development of a LWMS at the Local Structure Plan (LSP) stage and a Urban Water Management Plan (UWMP) at the subdivision stage.
- Undertaking a fauna survey and targeted flora survey to support the EPBC Act referral of the property.
- Possible contaminated sites investigations prior to decommissioning of the telecommunications compound.
- Preparation of a Fire Management Plan for the site in accordance with the WAPC and FESA (2010) guidelines.
- Possible Aboriginal heritage survey to confirm that heritage sites are not present in the area.

2.0 PROJECT VISION + OBJECTIVES

PROJECT VISION + OBJECTIVES

The Town Centre Structure Plan will assist to identify key components of the long term direction for orderly and proper growth of Bremer Bay. The main objectives of the Structure Plan include:

- Ensuring the Town Centre is the focus for future retail, commercial, community, civic and cultural uses;
- Improve the legibility of the road network and ensure the heart of the town is easily accessed.
- Ensuring the scale and activities within the Town Centre are commensurate with the intended population for Bremer Bay, commercial viability and the town's coastal and rural setting;
- Providing for a range of services and amenities that will attract people to the area and sustain a constant level of community activity, inclusive of active after hours use, spaces for weekend markets and special events;
- Enhancing and develop a distinct Town Centre "main street" character and identity that complements the coastal and natural resources of Bremer Bay;
- Preserving significant areas of natural vegetation whilst balancing the practical requirements to clear land for safety, access and for future built form;
- Providing for greater housing choice through medium density residential development to maximise the number of people living within walking distance of the Town Centre or also provide suitable accommodation for residents to 'age in place';
- Maximising the range and mix of employment opportunities that can be provided within the Town Centre; and
- Creating a safe, convenient, prosperous Town Centre that services the existing and future needs of residents, visitors and tourists.

Basically, the town centre structure plan is intended to:

- Create a 'main street' for Bremer Bay and tie the town together around a focal point for locals residents and visitors.
- Provide a retail, office, entertainment and civic focal point for the Bremer Bay community.
- Create a sense of arrival in Bremer Bay and serve to orientate visitors to sites and activities of the region.



3.0 PLANNING FRAMEWORK

SITE PARTICULARS

Reserve 31611 (Lot 135) has an approximate area of 10.6 hectares and is generally bound by Bremer Bay Road, Garnett Road and John Street. Garnett Road runs along the western boundary of the site and is constructed to the Bremer Bay Primary School. A significant portion of the site contains remnant vegetation, and a portion of the north - west section of the site is cleared of vegetation and is a disused oval.

STATUTORY FRAMEWORK

Shire of Jerramungup Local Planning Scheme No. 2

Reserve 31611 is zoned SU8 'Special Use' under the Shire of Jerramungup Local Planning Scheme No 2 (the Scheme). Specific provisions apply under Schedule 4 of the Scheme and the 'Special Use' zone is designated as:



Figure 2: Extract of Local Planning Scheme Source: Western Australian Planning Commission

"Bremer Bay Town Centre providing for:

- Civic uses
- Offices
- Dwellings under the medium density codes of the Residential Design Codes
- Community purposes
- Shops
- Movements systems
- Landscaping areas
- Civic spaces, and parking."

The Scheme lists conditions for the Special Use' zone stating that:

"A Structure Plan is to be prepared by the proponent and approved by the local government and endorsed by the Commission before any subdivision or development.

The Structure Plan will incorporate:

- A Strategy to retain areas of native vegetation in the design to enhance local character of the centre and conserve water;
- Permissible land uses;
- Road and Servicing networks;
- Development staging; and
- Such other matters as determined by the local government".

Shire of Jerramungup Local Planning Strategy June 2006 and Draft Local Planning Strategy Limited Review 2011

The Western Australian Planning Commission adopted the Shire of Jerramungup's current Local Planning Strategy in 2006. In 2008, the Shire prepared a new Strategic Plan identifying a number of factors that could be the catalyst for future population growth such as the proposed Southdown Mine near Wellstead, upgrades to the Fitzgerald River National Park and a number of scheme amendments seeking approval for the rezoning of land for residential purposes. In response to these factors the Shire of Jerramungup has initiated a limited review of the Local Planning Strategy with consultation closing end of September 2011.

The underlying objective of the Local Planning Strategy (LPS) is to provide for existing and anticipated land uses, to enable new land requirements to be appropriately accommodated as they arise, and to ensure that natural resources are protected and managed for the present and future needs of the community.

The Structure Plan for the Bremer Bay Town Centre is consistent with the following objectives of the LPS:

- To protect current planning options for the long-term urban development of the region. The proposed Southdown mine near Wellstead is anticipated to bring population growth to Bremer Bay during the construction and operation phases. Estimates for the mine include up to 2000 workers during the construction phase and a permanent workforce of 650. It is anticipated 20% of the permanent workforce may chose to live in Bremer Bay. The Structure Plan for the Town Centre augments the Strategy objectives to capitalise on the opportunities that this additional population will bring and plan for additional services required to sustain an increase in population.
- To preserve and protect the existing rural character of the area, and protect areas of high landscape interest.
- To provide for more intensive use of land in environmentally and socially suitable areas for uses such as intensive agriculture, rural/residential retreats, and urban expansion.
 - The plan highlights the existing remnant vegetation corridor and brings the natural environment into the development as an intrinsic element of the proposed Main Street.
- To ensure that land use and development are related to the physical capability and suitability of the land to accommodate such development without environmental degradation, and are undertaken in a manner that protects the overall amenity of the subject area.
 - The plan has been designed to be responsive to the opportunities and constraints of the subject site.
- To maintain and enhance the livelihood and lifestyle of residents as far as possible.

There are a number of small businesses that operate in Bremer Bay, many operate from their place of residence. The Structure Plan offers an opportunity for these businesses to grow and take advantage of better exposure to potential clients and customers.

• To provide for a variety of lifestyles and residential needs through the provision of a range of lot sizes.

The private market sufficiently provides for single detached dwellings on larger lots but limited opportunities currently exist for residents to 'age in place'. The Structure Plan allocates an area for future residential opportunities in the form of smaller lots or a retirement village concept. This site could also provide additional opportunities for short-stay accommodation to cater for an increase in tourism activity within the locality.

 To ensure as far as possible that all residents have access to a wide range of community services and facilities.

The Structure Plan facilitates the possible expansion of additional retail and commercial and recreational opportunities and improved essential services delivery such as health care.

4.0 THE STRUCTURE PLAN

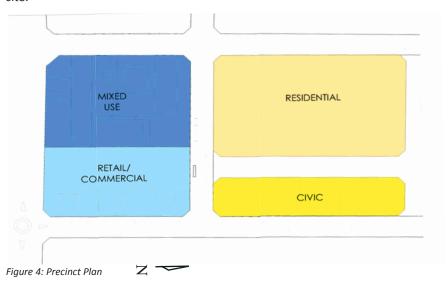
The Structure Plan graphic (Figure 3). Key elements of the Structure Plan are as follows:

The Town Centre has been divided into four precincts (Figure 4), reflective of design considerations and future development intent. These precincts are:

- (a) Mixed Use
- (b) Retail and Commercial Core
- (c) Civic
- (d) Residential

Development of the town centre is expected to radiate from initial development of the retail and commercial core and the new north-south main street. Initial development will also include the construction of the car park area for the retail and-commercial core and on-street parking for cars, cars towing caravans and tourist buses.

It is envisaged that the Shire of Jerramungup will prepare design guidelines which will control the built form interface at ground level in order to maintain appropriate pedestrian scale, vibrancy, and attractiveness within the town centre. This document will complement the Structure Plan and Landscape Masterplan which has been prepared and indicate at a more detailed level the desired built form outcomes for the site.



MIXED USE

This precinct accommodates an area for a possible future Police Station and Health Campus Facility which have both been earmarked for Bremer Bay. Other possible uses for this precinct include a new tourist and information centre and educational establishment (i.e. research facility associated with the Fitzgerald River National Park).

This precinct could also permit additional commercial and retail uses should the commercial and retail core precinct be developed to capacity and the population growth necessitates additional floorspace.

RETAIL AND COMMERCIAL CORE

Several key commercial drivers were analysed during the design and preparation of the Structure Plan for the town centre. A Retail Demand Analysis Report was prepared by Taktics4 (Attachment 1). Some of these commercial considerations for the retail and commercial areas were balanced against the urban design, environmental and civil considerations which influence the site.

The Retail and Commercial Core precinct of the Structure Plan focusses on the following key commercial drivers:

Arrival and Accessibility

- The retail and commercial core focuses on a main street which delivers customers into the town centre from all directions not just past the town centre.
- The main street is the logical route to the centre of town with as few turns as
 possible to access the street.
- The town centre has a logical and clearly designated point of arrival and all infrastructure and design decisions will reaffirm this point i.e. construction of a roundabout and changes to the road pavement materials.

Exposure

- All retail and office and civic activity trades to a single street.
- The non retail activity is just as critical in a small town centre as all pedestrian movement is critical to creating a vibrant environment. The retail and commercial core is within close walking distance to other uses proposed for the town centre creating a critical mass.

- All retail and commercial activity should have a zero setback from the frontage and sides to create a continuous and contiguous streetscape.
- A straight street will ensure that all businesses have the same level of exposure

Configuration

 The street should encourage double sided street frontage – retail activity should be the predominant street front with office based above the shops and civic in an adjacent precinct on the same street.

The Structure Plan proposes the core retail and commercial development fronts onto the new north-south main street.

Although a main street is ideally 'double sided' to encourage street life and critical mass of retail and associated activity into a single area, there were three main overriding factors discussed during the design process that led to the retail and commercial area being delineated as single-sided on the plan. These factors include:

- The desire to stretch the retail area from a Borden Bremer Bay Road frontage to the 26m contour and capitalise on the potential views to the east;
- Bremer Bay is a destination rather than a through town. There is no overriding need to concentrate retail development in a way that encourages people to stay and spend their money in one location. They will attend the town centre regardless as it will end up being the major retail area in the town.
- The ability to locate retail and commercial on both sides of the proposed main street is constrained by the retention of the remnant vegetation for the ecological corridor. From a design perspective the proposed location and configuration of the retail and commercial core is considered the most plausible on the basis that it does not turn its back on the natural landscape and will integrate with the other proposed precincts.

The Structure Plan allocates almost 3000sqm of retail and/or commercial floorspace along the main street. Based on retail analysis prepared during the design and preparation of the Structure Plan, this floorspace will sustainably support a population in the vicinity of 2,000 and up to 2,500. This population figure is consistent with the projections in the Shire's Local Planning Strategy Review.

The Structure Plan also allocates two additional future development sites which could accommodate additional retail and commercial floorspace should population growth and demand necessitate.

It is anticipated that the Shire of Jerramungup will encourage two storey development along the new main street and therefore, it is possible for commercial floorspace to be accommodated on the second floor of a building.

The Shire of Jerramungup is also supportive of shop-top housing as a means of assisting people in establishing businesses within the town centre. The costs of establishing a business and also having to also buy accommodation can be prohibitive in a location such as Bremer Bay.

CIVIC PRECINCT

The Civic Precinct is proposed in the central area of the Structure Plan area as it has the closest links to adjacent established residential areas and local school. The benefit of locating the civic uses in this location enables future built form to utilise the 26 m contour to capitalise on the views to and from the site which was expressed as a key design consideration during the preparation of the plan.

The Civic Precinct provides an opportunity for the co-location of community uses such as a new Shire Office, community centre or recreation centre, library/telecentre, and childcare and playgroup facilities. The plan also proposes the civic area incorporates a space that people can enjoy cultural events, social gatherings, celebrations and a place to socialise, exercise and participate in recreation activities.

RESIDENTIAL

According to the 2006 Census approximately 35% of Bremer Bay's resident population were over 50 years old and almost 90% of the total population reside in single detached dwellings.

The current residential lot activity in Bremer Bay sufficiently caters for any additional single detached dwellings for additional families with a number of new residential developments currently underway, however, the market does not provide for the ageing population or provide the necessary services to allow members of the Bremer Bay community to 'age in place'. The town centre offers an opportunity for additional aged accommodation to be provided centrally within Bremer Bay to allow residents of Bremer Bay and the surrounding region to 'age in place' and continue to live within their community rather than relocate to nearby regional centres such as Albany due to lack of suitable accommodation options.

4.0 THE STRUCTURE PLAN

A parcel of land is incorporated into the Structure Plan providing an opportunity for a different residential built form that is presently not being provided by the private market. This could be medium density housing in the form of single or two storey dwellings of 1 or 2 bedrooms on smaller lots (i.e. 300sqm) or a retirement village concept. It is not intended that this land be developed for the standard lot subdivision product. A portion of this land could also be developed for short-stay or tourist accommodation.



Example of Medium Density Housing suitable for population to 'age in place' (Illustrative Purposes Only)

GENERAL PROVISIONS

Vegetated Ecological Corridor

The long term economic future of Bremer Bay is intrinsically linked to its role as a gateway to the Fitzgerald River National Park and as a base for those attracted to its natural assets. The site contains significant areas of natural bush land which has contributed for a long time to the local landscape character and identity of Bremer Bay.

Reserve 31611 is an ecological linkage between two areas of regional conservation significance (Coastal and Fitzgerald River corridors) and the plan proposes the retention of a 120 metre wide strip of native vegetation between the Borden-Bremer Bay Road through to the northern section of the subject site be protected and enhanced. The plan highlights the existing ecological corridor and brings the natural environment into the development as an intrinsic element of the proposed Main Street.

It is important for native vegetation to be retained in strategic locations, particularly around the perimeter of the reserve as this will maintain the integrity of existing streetscapes along Garnett Road and John Street as well as provide a buffer to the prevailing winds.

Through careful design of the patterns and forms of development, significant areas to represent the nature of existing local vegetation can be protected and maintained as part of the Town Centre development. Scattered trees or 'clusters' of vegetation can be incorporated into public spaces where feasible whilst being mindful of bushfire safety.

The Department of Environment and Conservation noted in their submission on the previous Structure Plan options prepared in 2010 for the site that Reserve 31611 is a core linkage between the Coastal Corridor that extends from near Albany in the west and the Fitzgerald River Corridor in the east. Although the remnant native vegetation on Reserve 31611 is only 120 m wide, it is the widest remaining linkage west of the Wellstead Estuary.

Main Street

A new north-south road is proposed in the Structure Plan to provide connectivity between Borden-Bremer Bay Road and the existing residential development to the north of the Town Centre. The new main street will provide on-street parking for both cars and vehicles towing caravans and trailers. It is also possible for a bus bay to be provided along the new Main Street.

The Main Street is to be boulevard style street with on street parking, water sensitive urban design treatments and wide footpath areas to encourage alfresco uses.

A land swap will be required with the Department of Education to facilitate this new north-south road. The proposed structure plan and design allows the school site to retain an area of 4 hectares and provides for an another road frontage for the school which will provide additional area for parents to drop-off and collect their children.

Engineering and Movement Networks

The Structure Plan proposes a large roundabout as an entry statement into the Town Centre to assist in directing traffic onto the Main Street and provides a link and connection to the businesses situated along Gnombup Terrace.

The roundabout not only serves as an entry statement but will assist in slowing traffic (in addition to changing the road paving materials and colours) to signal to drivers they have entered the Bremer Bay Town Centre.

Footpaths and cycle paths will be provided to make pedestrian movements safe and increase pedestrian permeability. Link paths through the ecological corridor to reduce the walking distance between the Main Street and existing residential areas are also proposed. It is recommended that existing paths through the remnant vegetation be reviewed and rationalised to ensure the ecological value and integrity of the vegetation is retained.

Paths will also be used as visual corridors to draw the eye from the remainder of the townsite to the town/civic spaces.

The development of the site is anticipated to be sewered. The preliminary engineering investigations indicate the site is suitable for sewered development from a geotechnical perspective.

A preliminary engineering investigation has been undertaken by Porter Consulting Engineers with findings indicating that the site is able to connect to existing services located in adjoining streets.

The hydraulic conductivity of the local soils is poor. Infiltration on site is likely to be limited, which may be a constraint for the use of infiltration on site for stormwater management and on site disposal of wastewater. Drainage management on the site will need to consider the implications of low infiltration rates. Some forms of stormwater disposal, such as soakwells, may not be feasible or will require the installation of a sand layer to enhance infiltration. These issues will be addressed in the Local Water Management Strategy (LWMS).

CORE REQUIREMENTS

Overall the Structure Plan provides a broad land use and development framework for the Town Centre and retains a certain level of flexibility so that the Shire of Jerramungup can respond to the needs of the community. However, the following core elements and design principles shown on page 21 will need to be demonstrated as part of any future development proposals:

- The connections between streets, pedestrian and cycle pathways, public and publicly accessible spaces and facilities must be seamless, allowing for universal access and providing a legible built form.
- Retail and Commercial Activity is to be concentrated within the retail and commercial core and promote activation along the new main street
- Public spaces must be attractive and useable to encourage social interaction.

It is noted the lot layouts and building footprint as denoted on th structure plan are indicative only and the final layout will respond to the commercial needs of individual developers and the approvals process of the Shire of Jerramungup.

4.0 THE STRUCTURE PLAN

LEGEND

- REMNANT VEGETATION
- CIVIC
- MEDICAL CENTRE
- POLICE STATION
- PARKS AND NATURE RESERVE
- OFF-STREET PARKING
- STREET PARKING
- DOUBLE LENGTH STREET BAYS 7B
- RETAIL
- **FUTURE DEVELOPMENT**
- OPPORTUNITY SITE

RESIDENTIAL)

- FUTURE COMMUNITY AREA FUTURE DEVELOPMENT OPPORTUNITY (POSSIBLE
- FUTURE VISITOR CENTRE
- EXISTING PRIMARY SCHOOL

PARKING

- ON-STREET 14 SINGLE LENGTH BAYS
- DOUBLE LENGTH BAYS
- TOTAL 32

OFF-STREET

108 OFF STREET PARKING

(EXCLUDING PARKING FOR VISITOR CENTER, POLICE STATION AND CIVIC)

RETAIL

TOTAL AREA: 2919 SQM

EXPLANATORY NOTES

- 1. Lands swap required with school to facilitate new Nort-South main street. Alternate connection to north via diagonal road through parks and nature reserve subject to DEC endorsement.
- Future development oportunity sites allow for expansion should population growth support. Opportunity for 9B to be a community plaza/park space. Opportunity for activities such as weekend markets.
- Retail Floor plates to be adaptable to allow for flexibility, design should facilitate activation of both frontages and address each corner. Opportunity for shop top
- New entrance roundabout possibility of entrance statement feature.
- Retention of vegetation along eastern boundary of new town centre is an integral component of the masterplan. Creates ecological corridor/green link through Bremer Bay. Opportunity for passive





Note: Building locations and types of land uses are indicative only. Actual locations may change subject to further detailed design and market conditions.



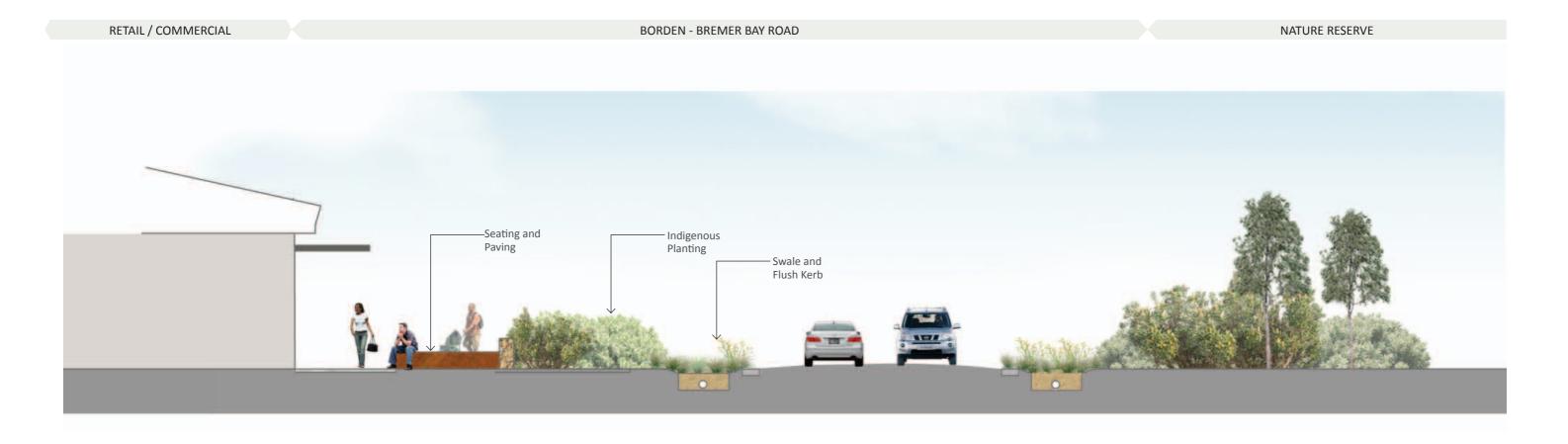


SECTION A NEW MAIN STREET



SECTION B NEW MAIN STREET





SECTION C BORDEN - BREMER BAY ROAD





5.0 LANDSCAPE MASTERPLAN

LANDSCAPE MASTER PLAN

Section 5 of the report comprises a Landscape Masterplan and several supporting graphics to assist in the successful implementation of the Structure Plan.

Key Figures include:

Figure 6 - Landscape Masterplan

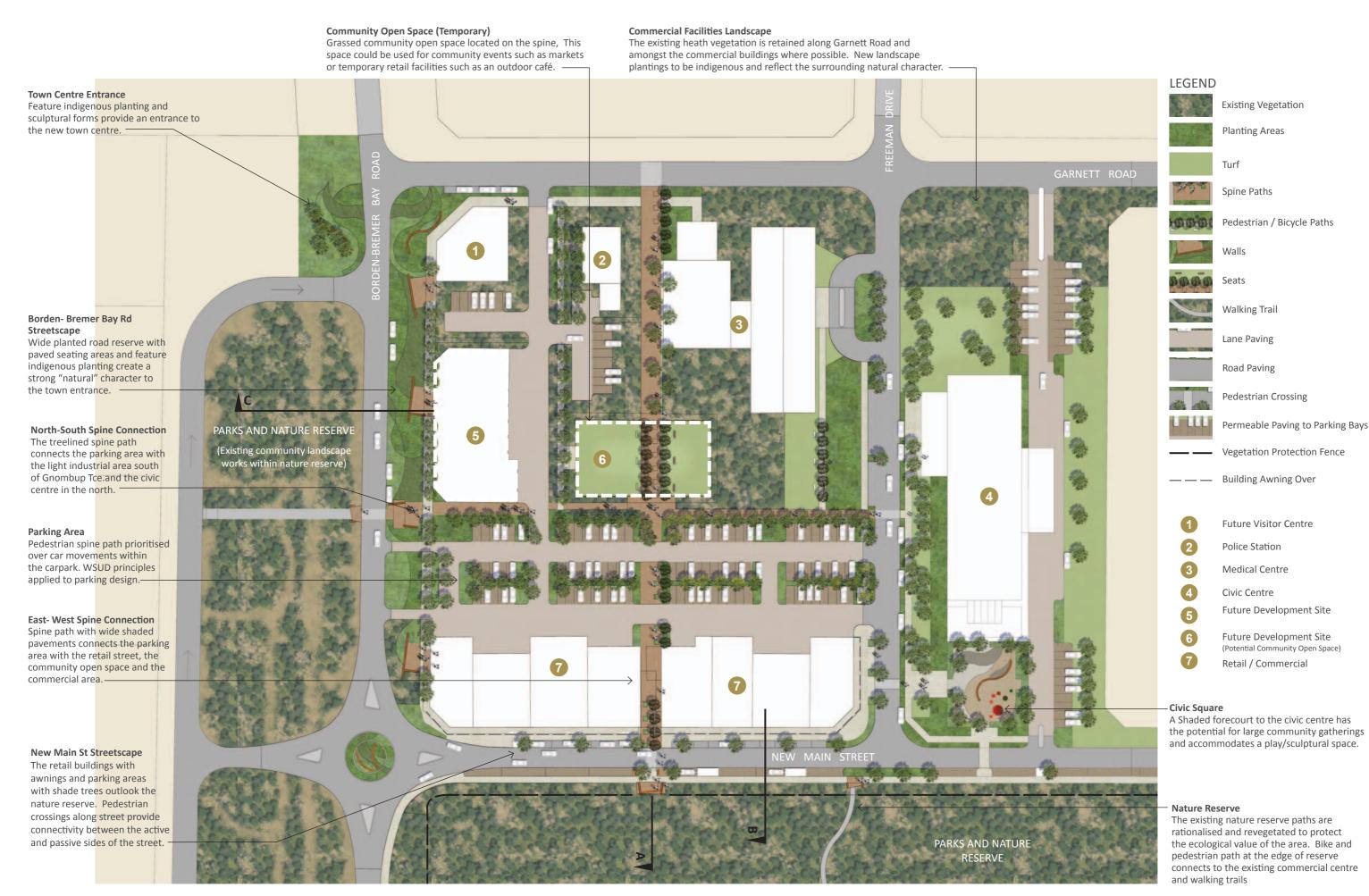
Figure 7 - Design Principles

Figure 8 - Circulation Plan

Figure 9 - Water Sensitive Urban Design Principles

Figure 10 - Planting Character

NOTE: The Landscape Masterplan is indicative only. The building layouts, lot layout, lot orientation and landscape treatments are subject to change. The following figures provide general overarching design principles to assist in the successful implementation of the Structure Plan.



LANDCORP | SHIRE OF JERRAMUNGUP | BREMER BAY TOWN CENTRE MASTER PLAN | MASTERPLAN





DESIGN PRINCIPLES

RESPECT LOCAL CHARACTER, CLIMATE AND UNIQUENESS

- Preserve low heathland landscape with appropriate new landscape character
- Maintain district views.
- Consider residents comfort through appropriate solar orientation and shelter from rain and the prevailing NW wind.
- Provide opportunities for place making
- Use local materials and building character in the new urban fabric of the town centre









INTEGRATE WITH NATURE

- Retain vegetation (where possible) through careful placement of buildings and paths
- Protect and improve the quality of natural areas through such measures as fencing, reduction in pollutants and revegetation of disturbed pockets
- Highlight the unique ecological values of the natural landscape through interpretive signage
- Use indigenous plantings within streetscape
- Provide large areas of mass planting within the urban environment to create a connection to the adjoining natural landscape
- Integrate the new built form into the natural landscape







DESIGN FOR CONNECTED, SAFE AND ACCESSIBLE PLACES

- Provide compatible interfaces between public and private spaces
- Develop linkages between the existing "commercial" centres and the new town centre
- Integrate and respect the existing permanent communities
- Provide a "total" town way finding strategy through the use of entry markers, directional signage and pavement and landscape types
- Connect to existing pedestrian and bike networks
- Consider walkability distances in design – 400M is the accepted distance a person will walk
- Provide a bicycle and pedestrian network with suitable facilities such as signage, bike racks, seating and drinking fountains
- Consider CPTED principles in design







DESIGN FOR OPEN SPACE DIVERSITY

- Promote community interaction and inclusion in the design of public spaces
- Provide outdoor spaces with multiple functions eg. wide centred pedestrian walkway that could be a Sunday market space or play areas that acts as a sculptural forecourt to the civic building
- Provide outdoor spaces that can cater for a varying population ie large spaces for summer visitors and smaller intimate spaces for local residents in the winter
- Consider future population expansion in open space design







DESIGN FOR SUSTAINABILITY

- Design with appropriate use of building material to maximise energy efficiency
- Promote waste and water minimisation from project conception
- Encourage the use of non motorised transport to reduce reliability on fuel
- Provide recycle bins within streetscape







DESIGN FOR WATER

- Utilise Water Sensitive Urban Design principles in design
- Consider rain water collection and reuse for irrigation and toilet flushing ie water collections from public buildings such as bus shelters and public toilets
- Encourage roof water collection from all buildings
- Provide rain gardens/ large planting areas within the streetscape area
- Recharging aquifers with permeable paving for areas such as carparks, walking trails and cycle paths
- Minimise non permeable areas by minimal road and path pavement widths
- Collect stormwater with a swale flush kerb at the edge of roads at the natural areas
- Investigate one way cross fall roads to avoid traditional collection of STW with pits and pipes
- Investigate the use of bio basins or bio swales for water quality treatment



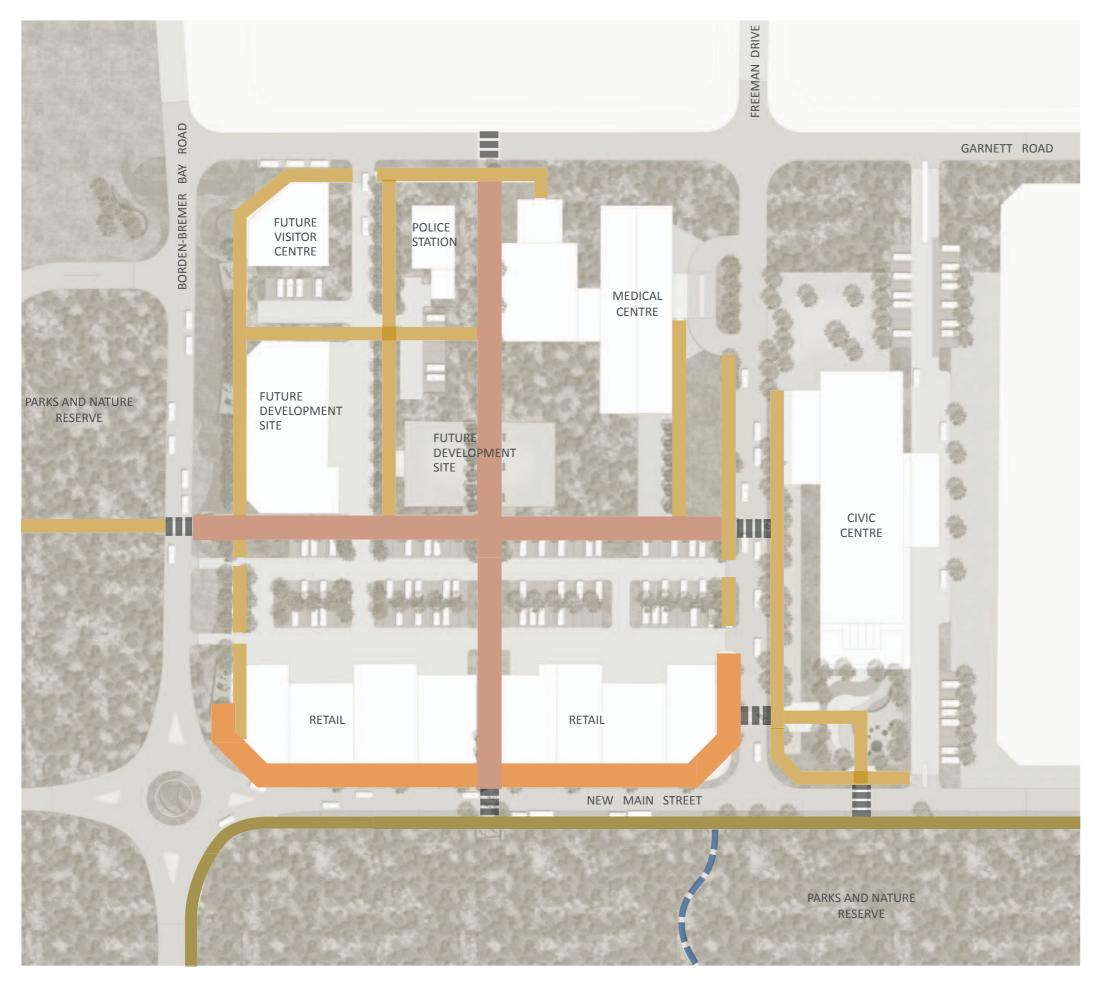




date: 11 October 2011 | drawing no: SP113901-01 | issue: A











scale: 1:000 @ A3 | date: 11 October 2011 | drawing no: SP113901-05 | issue: A







Car park with central swale median



Permeable car parking pavement



Rain garden in retail street



Flush kerb and swale

LEGEND

Permeable Paving to Parking Bays

Swales

Flush Kerbs

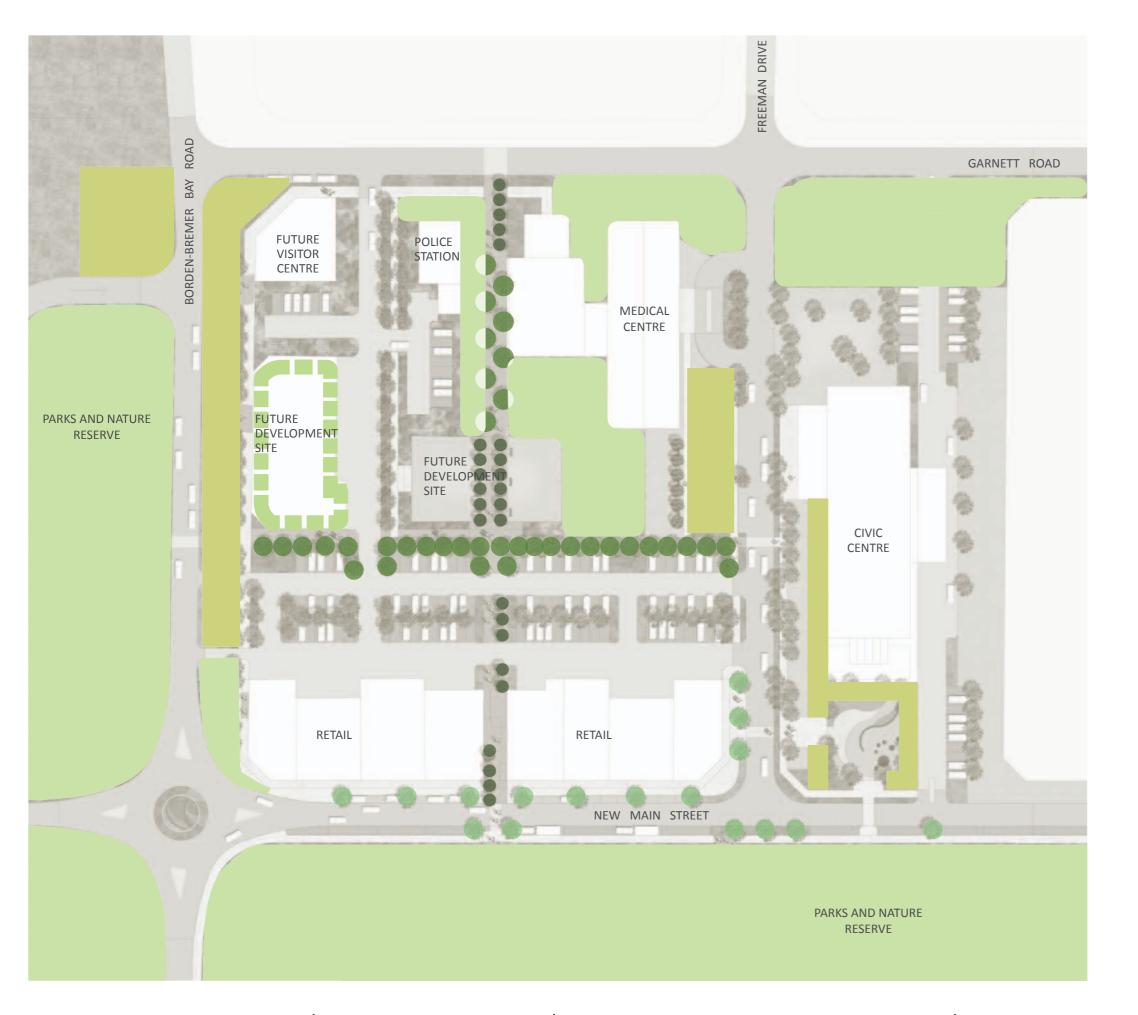
Wheel Stops

Bollards

LANDCORP | SHIRE OF JERRAMUNGUP | BREMER BAY TOWN CENTRE MASTER PLAN | W.S.U.D. PLAN









Feature Tree Type 2

New Main Street Tree Type 3

Car Park and Lane Street Trees Type 4

LANDCORP | SHIRE OF JERRAMUNGUP | BREMER BAY TOWN CENTRE MASTER PLAN | PLANTING CHARACTER





6.0 USE CLASS TABLE

BREMER BAY TOWN CENTRE USE CLASS TABLE

The Use Class Table indicates, subject to the provisions of the Scheme, the permissibility of uses within the Town Centre including the appropriate or preferred precinct locations. NOTE: An appropriate use does not guarantee development approval. Prior to any development on the site, a Development Application and appropriate Building License approval must be obtained.

"P" means that the use is permitted providing the use complies with the relevant development standards and the requirements of the Scheme (or Design Guidelines as applicable)

"D" means that the use is not permitted unless the local government has exercised its discretion by granting planning approval and it can be demonstrated by the applicant that the development proposal meets the intent of the Structure Plan and Design Guidelines.

"A" means that the use is not permitted unless the local government has exercised its discretion by granting planning approval after giving special notice in accordance with the applicable advertising provisions with the Local Planning Scheme and it can be demonstrated by the applicant that the development proposal meets the intent of the Structure Plan and Design Guidelines.

If a proponent proposes to carry out a land use that is not specifically mentioned (or assigned to an applicable precinct) within the table below and can not reasonably be determined as falling within the type class or genus of the uses listed in the table below, then the use is not permitted within the Town Centre unless, the Shire determines to exercise discretion in accordance with the provisions of the Local Planning Scheme which deal with approval of prohibited or 'X' use classes.

USE CLASS	PERMISSIBILITY	APPLICABLE PRECINCT	DEFINITION
Aged or dependant persons dwelling	D	Residential	Dwelling of a person who is aged 55 years or over or is a person with a recognised form of disability requiring special accommodation provisions for independent living or special care.
Civic Use	Р	Civic	"civic use" means premises used by a government department, an instrumentality of the Crown , or the local government, for administrative, recreational or other purposes
Club Premises	D	Civic	"club premises "means premises used by a legally constituted club or association or other body of persons united by a common interest
Child Care Premises	Р	Civic	"child care premises" has the same meaning as in the Community Services (Child Care) Regulations 1988
Consulting Rooms	P	Mixed Use	"consulting rooms" means premises used by no more than 2 health consultants for the investigation or treatment of human injuries or ailments and for general outpatient care
Educational Establishment	D	Mixed Use	"educational establishment" means premises used for the purposes of education and includes a school, tertiary institution, business college, academy or other educational centre
Exhibition Centre	D	Mixed Use, Retail and Commercial Core	"exhibition centre" means premises used for the display, or display and sale, of materials of an artistic, cultural or historical nature, and includes a museum or art gallery
Grouped Dwelling	D	Residential	A dwelling that is one of a group of two or more dwellings on the same lot such that no dwelling is placed wholly or partly vertically above one another, except where special conditions of landscape or topography dictate otherwise, and includes a dwelling on a survey strata with common property.
Home Business	D	Residential	 "home business" means a business, service or profession carried out in a dwelling or on land around a dwelling by an occupier of the dwelling which - (a) does not employ more than 2 people not members of the occupier's household; (b) will not cause injury to or adversely affect the amenity of the neighbourhood; (c) does not occupy an area greater than 50 square metres; (d) does not involve the retail sale, display, or hire of goods of any nature; (e) in relation to vehicles and parking, does not result in traffic difficulties as a result of the inadequacy of parking or an increase in traffic volumes in the neighbourhood, and does not involve the presence, use or calling of a vehicle more than 3.5 tonnes tare weight; and (f) does not involve the use of an essential service of greater capacity than normally required in the zone

USE CLASS	PERMISSIBILITY	APPLICABLE PRECINCT	DEFINITION
Home Occupation	D	Residential	"home occupation" means an occupation carried out in a dwelling or on land around a dwelling by an occupier of the dwelling which - (a) does not employ any person not a member of the occupier's household; (b) will not cause injury to or adversely affect the amenity of the neighbourhood; (c) does not occupy an area greater than 20 square metres; (d) does not display a sign exceeding 0.2 square metres; (e) does not involve the retail sale, display or hire of goods of any nature; (f) in relation to vehicles and parking, does not result in the requirement for a greater number of parking facilities than normally required for a single dwelling or an increase in traffic volume in the neighbourhood, does not involve the presence, use or calling of a vehicle more than 2 tonnes tare weight, and does not include provision for the fuelling, repair or maintenance of motor vehicles; and (g) does not involve the use of an essential service of greater capacity than normally required in the zone
Hotel	А	Residential	" hotel" means premises providing accommodation the subject of a hotel licence under the Liquor Licensing Act 1988, and may include a betting agency on those premises, but does not include a tavern or motel
Hospital	Р	Mixed Use	"hospital" means premises in which persons are admitted and lodged for medical treatment or care and includes a maternity hospital
Medical Centre	Р	Mixed Use	"medical centre" means premises, other than a hospital, used by one or more health consultants for the investigation or treatment of human injuries or ailments and for general outpatient care (including preventative care, diagnosis, medical and surgical treatment, and counselling)
Motel	А	Residential	"motel" means premises used to accommodate patrons in a manner similar to a hotel but in which specific provision is made for the accommodation of patrons with motor vehicles and may comprise premises licensed under the Liquor Licensing Act 1988
Multiple Dwelling	D	Residential and Retail and Commercial Core	has the same meaning as in the Residential Design Codes
Office	Р	Mixed Use and Retail and Commercial Core	" office" means premises used for administration, clerical, technical, professional or other like business activities
Place of Worship	D	Civic	"place of worship" means premises used for religious activities such as a church, chapel, mosque, synagogue or temple
Recreation - Private	D	Civic	"recreation - private" means premises used for indoor or outdoor leisure , recreation or sport which are not usually open to the public without charge
Restaurant	Р	Mixed Use and Retail and Commercial Core	"restaurant" means premises where the predominant use is the sale and consumption of food and drinks on the premises and where seating is provided for patrons, and includes a restaurant licensed under the Liquor Licensing Act 1988
Service Station	А	Mixed Use	"service station" means premises used for- (a) the retail sale of petroleum products, motor vehicle accessories and goods of an incidental/convenience retail nature; and (b) the carrying out of greasing, tyre repairs and minor mechanical repairs to motor vehicles, but does not include premises used for a transport depot, panel beating, spray-painting, major repairs or wrecking

6.0 USE CLASS TABLE

USE CLASS	PERMISSIBILITY	APPLICABLE PRECINCT	DEFINITION
Shop	Р	Retail and Development Core	"shop" means premises used to sell goods by retail, hire goods, or provide services of a personal nature (including a hairdresser or beauty therapist) but does not include a showroom or fast food outlet
Shop	D	Mixed Use	"shop" means premises used to sell goods by retail, hire goods, or provide services of a personal nature (including a hairdresser or beauty therapist) but does not include a showroom or fast food outlet
Short Term Tourist Accomodation	А	Residential	means accommodation specifically designed for tourists in the form of villas, townhouses or apartments but does not include caravan park, bed and breakfast, chalets but does include hotel or motel.
Shop Top Housing	Р	Retail and Development Core	means a unit or apartment located above retail or commercial premises.
Tavern	D	Mixed Use	" tavern " means premises licensed as a tavern under the Liquor Licensing Act 1988 and used to sell liquor for consumption on the premises
Tourist Information Centre	Р	Mixed Use, Civic, and Retail and Commercial Core	means a premise that provides tourism information to the visitors on the area's attractions, lodgings, mas and other items relevant to tourism



7.0 STAGING AND IMPLEMENTATION

STAGING

Reserve 31611 is a significant size and it is not anticipated that the entire area will be required for short to medium term development. Figure 11 provides an indicative staging plan for the Bremer Bay Town Centre. The development and staging particularly of the retail and commercial core of Town Centre will be largely driven by market demand and the the final lot layout will respond to the commercial needs of individual developers and the approvals process of the Shire of Jerramungup.

Stage 1

It is the Shire of Jerramungup's intention to commence the detailed design and construction of the following items within the next twelve months:

- Streetscape upgrades to Borden-Bremer Bay Road;
- Construction of the roundabout along Borden-Bremer Bay Road to facilitate connectivity between the proposed retail along the new main street and the businesses located along Gnombup Terrace;
- Upgrade and connect services to the first lot in Stage 1 development area. Exact location and size is yet to be determined;
- Construct and landscape the new north-south main street up to the area identified for civic uses. Main street works could also include the construction of the on-street parking for cars, caravans and tourist bus/es;
- With the assistance of LandCorp subdivide the town centre initially into two land parcels and offer one lot for sale as a commercial site. Dimensions and area are yet to be determined.

Stage 2 onwards

The implementation and development of Stage 2 and onwards will be driven by the market demand and the Shire securing additional funding.

IMPLEMENTATION

The success of the town centre will be reliant on thoughtful design, integrating the built form and public domain. Design guidelines will be prepared by the Shire to ensure the future built form is responsive to the public domain and is flexible to adapt and respond to increases in population growth and the seasonal tourist activity.

The final location and form of buildings may differ from those indicated on the Structure Plan. The Design Guidelines will be developed to guide future built form. The Structure Plan does not attempt to predetermine detailed design decisions but provides some general principles. Some key design considerations include:

- Buildings should be of high quality contemporary design, appropriate for the
 intended use and materials should reflect the uniqueness and character of Bremer
 Bay. The design must make a positive visual contribution to its environment i.e.
 limit blank facades.
- The design of the buildings in the retail and commercial core should allow for the possibility of some adaptation and flexibility since the needs of future users can never be fully anticipated. Building design should ensure that the internal layout, position of entrances, stairs and methods of construction allows some flexibility in its use to extend its durability and long term value. Flexible floor plates will allow tenancies to expand or decrease floorspace according to market forces and facilitate temporary or interim tenancies or 'pop-up' stores (e.g. art shows or exhibitions) which could occupy a space for a period of time and reduce vacant tenancies.
- Buildings should be designed to provide pedestrian protection from the weather and create a comfortable external environment for pedestrians.

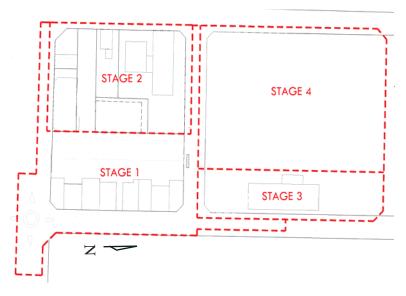
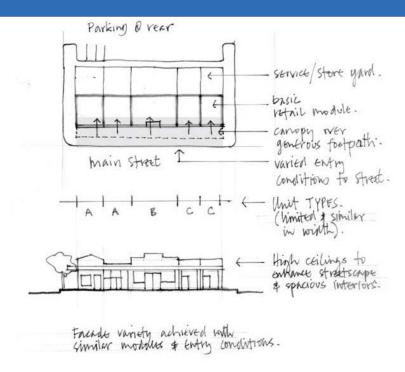
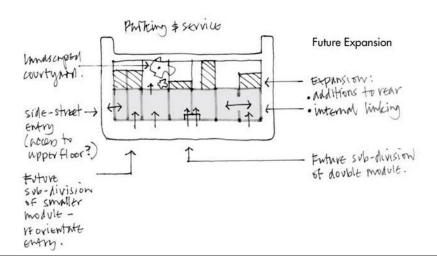


Figure 11: Indicative Staging Plan

Figure 12: Retail and Commercial Design Principles







Perspective Sketch (Illustrative Only - actual building styles to be determined during preparation of Design Guidelines): Looking north towards new main street from Borden-Bremer Bay Road.

ATTACHMENT 1 - RETAIL DEMAND ANALYSIS

ATTACHMENT 2 - PRELIMINARY ENVIRONMENTAL SITE INVESTIGATION REPORT