

Torquay and Jan Juc Structure Plan



Coastal Living Just Got Better

May 2007
(Final)

Reference Document

The Torquay and Jan Juc Structure Plan is a reference document of the Surf Coast Planning Scheme. As a reference document it provides background information to assist in understanding the context within which a particular policy or provision has been framed. This document is not part of the Surf Coast Planning Scheme and has no legislative status under the *Planning and Environment Act, 1987*.

Surf Coast Shire Council, 2008.

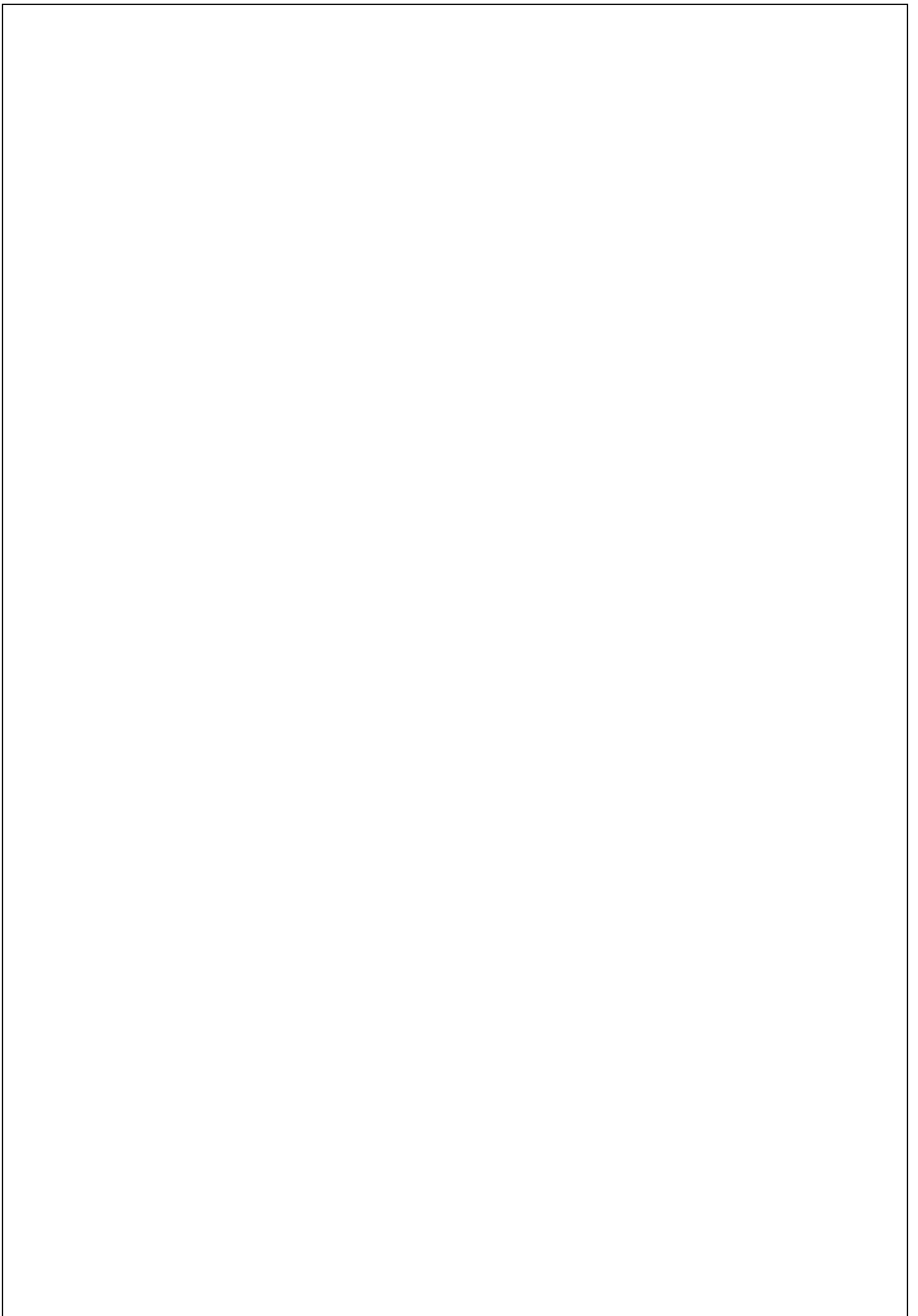


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Executive Summary

Torquay and Jan Juc have an important role on the south-west Victorian coast as a growth centre in a broad strategic context. The 'Victorian Coastal Strategy' (2002) advocates protection of environmental and landscape sensitive areas, while recognising the need to meet social and economic objectives by encouraging population growth to occur in Torquay which has relatively fewer environmental constraints. The 'Great Ocean Road Regional Strategy' (2004) reinforces this position.

The population of Torquay, Jan Juc and the immediate surrounding hinterland is expected to double between 2001 and 2021, from 10,485 to 21,400. It is projected that there will be some aging of the population in Jan Juc in particular due to limited expansion opportunities, but a significant increase in the number of young families in Torquay over that period. The 'Torquay Jan Juc Structure Plan 2007' reviews the strategies outlined in the 'Comprehensive Strategy Plan for Torquay and Jan Juc' adopted by the Shire in 1996, and establishes strategic directions for future growth of the two towns up to 2025.

A key difference between the 2007 Plan and past strategic plans for Torquay and Jan Juc is its focus on achieving objectives relating to sustainable development. The following principles have been incorporated into the Plan as a means of linking local development outcomes with national strategies for reducing water and energy use, and reducing greenhouse gas emissions, whilst improving social and economic conditions:

- Increase densities of residential development to reduce outward urban sprawl, both in established areas and in new subdivisions, particularly around retail, community and recreational facilities.
- Maximise opportunities for local employment to reduce commuting to jobs elsewhere.
- Establish pathways that optimise opportunities for walking and cycling within the towns.
- Incorporate Water Sensitive Urban Design techniques in new subdivisions, encourage reduced household water use, and support the use of recycled water.
- Provide a more effective public bus service within the towns.
- Encourage the design of new subdivisions to enhance mobility, connectivity and social interaction between residents.
- Encourage a diversity of housing types and affordability in the provision of housing.
- Encourage more energy efficient household design and public lighting.
- Protect sensitive environmental areas and enhance biodiversity/habitat linkages.

The 2007 Plan also concentrates more closely on land use planning matters than the 1996 Comprehensive Strategy Plan which addressed some issues outside the influence of Council. The following is a summary of the key objectives of the 2007 Plan:

SETTLEMENT – PLANNING, DESIGN & BUILT FORM

To accommodate the population growth of the Surf Coast Shire within Torquay / Jan Juc as one of two main urban growth centres in the Shire.

To create a planned township that makes efficient use of land in providing opportunities for residential growth and economic development, with well connected neighbourhoods.

To maintain and enhance the distinct identity and coastal character of Torquay / Jan Juc.

To achieve a diversity of housing types responsive of the needs of the community in styles that reflect the coastal image and character of the town and its natural environment and which promote energy and resource efficiency as a legacy of coastal living.

To promote subdivision designs which encourage walking, reduce car dependence and focus on community and shared spaces.

ENVIRONMENT

To protect and enhance significant environmental and cultural features which contribute to the ecological values, coastal character and residential amenity of Torquay and Jan Juc.

To encourage and facilitate development that is environmentally sustainable and makes best use of limited land available for future development.

ECONOMIC DEVELOPMENT

Activity Centres

Maximise local employment growth associated with retail activity generated by residents and tourists, and promote sustainable / attractive activity centres that re-enforce the surfing, beach and coastal image of Torquay, and are accessible to residents.

Industry

Maximise local employment growth associated with non-retail commercial development that is complementary to Torquay's coastal lifestyle image, both in terms of use and appearance.

Tourism

Encourage tourist activities and facilities that will grow the local tourist industry while marrying with the Torquay Jan Juc lifestyle and promoting / showcasing the community's values.

INFRASTRUCTURE

The Transportation System

To build on the existing transportation system in a manner that reduces car dependence, encourages walking and cycling for local trips, manages the summer tourist/holiday peaks and respects the coastal character of the towns.

Social Infrastructure and Community Development

To facilitate the timely provision of a range of community and recreation facilities to meet the needs of local residents, and promote community health and cohesion.

Open Space Network

To increase the provision and quality of all forms of open space to meet the broad range of needs of the community, and to site new open space to ensure its accessibility to all members of the community.

Servicing and Drainage

To integrate development with the efficient provision and use of service infrastructure, and encourage sustainable practices in the use of resources through planning and design.

Infrastructure Charges

To put in place an equitable funding framework that will ensure the timely provision of infrastructure that is essential to the needs of a sustainable community.

The 2007 Plan details physical and social infrastructure needs to accommodate future population growth in the towns, including upgrades to roads, intersections and public open space, as well as new sporting and community facilities. The cost of providing this infrastructure and a plan for collection of contributions from the proponents of developments based on the likely use of the infrastructure by new residents will be prepared as a Development Contribution Plan (DCP) for Torquay Jan Juc. Implementation of the DCP will enable the Surf Coast Shire to more effectively finance infrastructure to meet growing demand.

The 2007 Plan forms the basis for land use decision making in Torquay and Jan Juc. The Plan will be incorporated into the planning scheme by updating the Municipal Strategic Statement (MSS) through a planning scheme amendment.



1 Introduction and Background Information

Why review the Strategy?

The adjoining towns of Torquay and Jan Juc have experienced a rate of population growth in recent years that is amongst the highest in the State, growing at a rate of 4.5% pa between 1996 and 2001. This growth has been associated with the “sea change” phenomenon being experienced in other coastal areas, and is consistent with the ‘*Victorian Coastal Strategy*’ (2002) and ‘*Great Ocean Road Region Strategy*’ (2004) which acknowledge the capacity of Torquay to accommodate growth compared to other more environmentally sensitive coastal towns (eg Anglesea and Aireys Inlet) which are limited in their ability to grow due to environmental and other constraints.

The ‘Torquay and Jan Juc Structure Plan 2007’ (hereafter referred to as the ‘2007 Plan’) has been developed to set the strategic direction for development of land in Torquay and Jan Juc up to 2021 and beyond. It focuses particularly on the preferred development pattern for growth corridors to the north and west of Torquay, and the physical and social infrastructure requirements to service new development in those areas. It contains key objectives and planning responses that will ensure that Torquay and Jan Juc develop in an integrated and holistic fashion in order to meet wider social, economic and environmental objectives.

The 2006 Plan updates the ‘*Comprehensive Strategy Plan for Torquay Jan Juc*’ completed in 1996 by Henshall Hansen and Associates, which was used as the basis for Clause 21.10 (Torquay Jan Juc Strategy) in the Municipal Strategic Statement of the Surf Coast Planning Scheme, and which has guided growth of residential and commercial development in the towns since that time.

The 1996 Strategy Plan forecast that the population of Torquay and Jan Juc would nearly double from 5,500 in 1996 to 10,000 in 2011, however growth has outstripped this forecast with the population reaching an estimated 9,100 in 2003¹. Although it was prepared ten years ago, many of the principles of the 1996 Strategy Plan remain relevant today. The 2007 Plan uses the 1996 Strategy as a starting point and builds on the underlying strategies to produce a plan that reflects current knowledge and planning standards, including sustainability principles which are referred to in Chapter 2. An audit of progress in meeting key actions of the 1996 Strategy is attached as Appendix 1 to this report. This audit highlights a number of actions that remain outstanding that should be taken into consideration in the preparation of this strategy review.

A key driver of the 2007 Plan is the need to establish a Development Contributions Plan that allows the Council to collect contributions from new developments to assist with the funding of physical and social infrastructure that will be required to support continued population growth. Recent State Government legislation provides for collections of contributions, but only where a Plan has been prepared and forms part of the Planning Scheme. Although the Council has collected some contributions from subdividers over the past eight years or so, this has only been by individual agreement with land owners, and has not been comprehensive (ie has not included community infrastructure).

¹ Torquay Jan Juc Residential Land Supply Analysis 2005, Surf Coast Shire, Nov 2005.

Finally, whilst the 1996 Strategy established clear growth or settlement boundaries for the north, east and south-west edges of Torquay and Jan Juc, no such boundary was defined for the future growth corridor west along the Spring Creek valley. The importance of establishing robust coastal settlement boundaries is highlighted in the Victorian Coastal Spaces – Recommendations Report (April 2006), as advocated in both the Victorian Coastal Strategy 2002 and Great Ocean Road Region Strategy 2004. This matter will be explored as part of this review.

Role of the Torquay Jan Juc Structure Plan

The 2007 Structure Plan will:

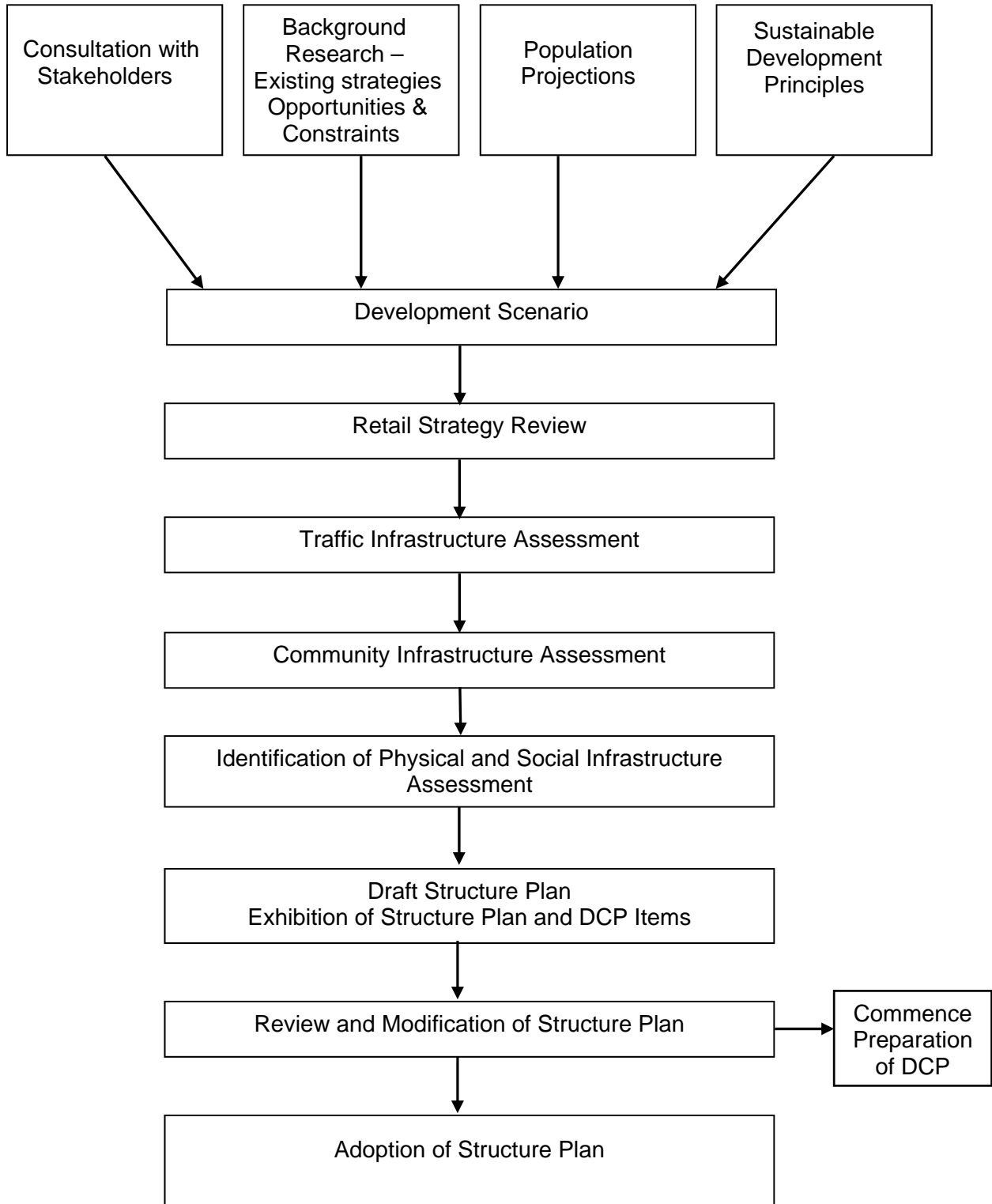
- Provide a clear land use framework for the development and growth of Torquay / Jan Juc, with emphasis on achieving environmentally sustainable development outcomes.
- Provide the strategic basis for an Amendment to Clause 21.10 of the Surf Coast Planning Scheme (Torquay Jan Juc Strategy) to update strategies relating to land use and development in Torquay and Jan Juc.
- Assist Council and other infrastructure providers such as Barwon Water and VicRoads to identify priorities for provision of new infrastructure to meet the needs of projected population growth.
- Establish a basis for rezoning of land for commercial and residential development in designated locations as required to meet increased demand, and indicate priorities for land release.
- Facilitate the preparation of a Development Contributions Plan and the introduction of a Development Contribution Overlay over land in Torquay and Jan Juc and the collection of development contributions by Council to fund new physical and social infrastructure.
- Give certainty to land owners and investors purchasing land as to the intended future land use.
- Indicate further strategic planning that is required to be undertaken by the Shire to address identified policy gaps.

The 2007 Plan has a time horizon of 20 years, but has been developed with the knowledge that growth is likely to continue well beyond this period.

Methodology

The following is a brief summary of the process followed to arrive at the 2007 Plan:

Figure 1.1 Methodology for Preparing 'Torquay and Jan Juc Structure Plan, 2007



1. Background Research

The 2007 Plan has been informed by a number of strategic planning studies completed in recent years, including the 1996 Comprehensive Strategy Plan, Outline Development Plans for Torquay North and Torquay West, a Public Open Space Strategy, and rezoning of land north-west of Torquay for future industrial growth in 2004. Notwithstanding, it was identified at the outset that a further review of the Retail Strategy was required, and that a comprehensive analysis of transport infrastructure and community facility needs was required to be undertaken (see below).

2. Consultation with Stakeholders

Interviews were conducted with external agencies such as Barwon Water, VicRoads and the State Department for Education (DET) at the commencement of the Strategy to identify servicing requirements and infrastructure planning issues. Internal staff from the Environment, Leisure and Recreation, Community Services and Infrastructure Units were also consulted in relation to physical and social infrastructure planning needs.

3. Sustainable Development Principles

The principles of Sustainable Development were examined early in the Study to identify how strategies at a national and state government level relate to development occurring in Torquay and Jan Juc. The Council's Environment Advisory Committee (ENVAC) was consulted in relation to this issue and a workshop involving representatives from Council Departments and Council Advisory Committees reviewed and refined the principles.

4. Population Projections

ID Consulting P/L had prepared population projections for the Shire on a township basis in 2004, with analysis of changes in different age groups. Together with assessment of past trends in building approvals, it was possible to identify likely changes to population over the Strategy period, and within different parts of the towns. These population projections were updated by ID Consulting in January 2006.

5. Development Scenario

The towns were divided into 3 main precincts to identify areas with a common catchment of population to assist with commencing the task of apportioning infrastructure charges (as part of the Development Contribution Plan). The precinct boundaries were generally determined by existing development patterns and physical edges such as major roads, and include Torquay North, Torquay Central (comprising the established area of 'Old Torquay' and the growth area west of the Surf Coast Highway), and Jan Juc. A fourth precinct nominated as the Spring Creek Urban Growth Corridor was also identified, comprising the potential first stage growth corridor west of Duffields Road, in acknowledgment of the future growth implications of this area. These precincts are able to be divided into sub-precincts as may be necessary when apportioning cost of specific infrastructure items.

6. Retail Strategy Review

Although a Retail Strategy Review occurred in 2003, further examination was required regarding the practical implementation of the long term Town Centre expansion to incorporate the former Primary School site, and beyond. Consultants Essential Economics and Planning by Design were engaged to review long term retail floor space requirements, and recommend means of meeting forecast demand whilst maximising local employment growth.

7. Community Infrastructure Needs Assessment

Consultants ASR Research were engaged to assess the need for various community and recreational facilities having regard to projected growth in the towns. Although some planning for public open space requirements and children's services had occurred, a more comprehensive and longer term analysis was required.

8. Transport Infrastructure Assessment

Consultants Traffix Group Pty Ltd were engaged to prepare an analysis of transport infrastructure requirements to service residential and tourist growth, including roads, paths and public transport. A road hierarchy had previously been adopted for Torquay, and planning of road networks within growth areas had previously occurred through preparation of Outline Development Plans. A

thorough assessment of projected traffic volumes was required however, in order to confirm the road hierarchy and identify future infrastructure needs or modifications.

9. Identification of Physical and Social Infrastructure Requirements

Based on past strategic studies, consultation with stakeholders and the above Transport and Community Infrastructure Needs Assessments, the physical and social infrastructure required to service projected population growth within Torquay and Jan Juc were identified.

10. Preparation and Exhibition of Draft Structure Plan

The Draft Structure Plan was prepared outlining detailed strategies based on the research and analysis in points 1-8 above. This Draft Plan was exhibited prior to detailed development of a Development Contributions Plan (DCP). The Draft Structure Plan identified infrastructure items being recommended for inclusion in a DCP to illicit community response prior to preparing the costing and apportionment plan.

11. Adoption of Torquay Jan Juc Structure Plan

The Structure Plan was adopted with modifications arising from the submissions received to the exhibition of the draft report. The DCP is being prepared as a separate document, hence the infrastructure items listed in the draft Structure Plan report have been excluded from the adopted report.

How to use the Structure Plan report

The report is divided into a number of chapters that are summarised as follows:

Chapter 1:

Introduction and Background

Overview of the reason for undertaking the review and how it will be used. It also outlines the methodology followed to prepare the 2007 Plan.

Chapter 2:

Sustainable Development in Torquay/Jan Juc

Looks at the principles of sustainable development at an international, national and local level, and establishes ways in which land use and development could be influenced in Torquay and Jan Juc to assist in achieving progress towards greater sustainability.

Chapter 3:

Torquay and Jan Juc in Context

Gives a detailed planning history of Torquay and Jan Juc, which is particularly important given the breadth of strategic planning that has been undertaken in recent years that has a bearing on the 2007 Plan. It also contains a description of the built and natural environment and contextualises the towns having regard to landscape character, drainage, cultural/heritage issues, tourism and environmental assets. Finally, opportunities and constraints to development of particular sites are assessed having regard to the material contained in this chapter.

Chapter 4:

Projected Growth and Infrastructure Needs Assessment

Includes projections of population growth up to 2021, as well as growth in visitation from tourism, and describes the development scenario for Torquay and Jan Juc upon which the Strategy is based. It examines the social and development infrastructure needs for the towns based on this scenario, as well as projecting future demand for retail and industrial floor space, and transportation requirements.

The material contained in Chapters 2 to 4 forms the basis for development of the Torquay and Jan Juc Structure Plan and the strategic direction provided in Chapter 5.

Chapter 5:

Key Objectives and Strategic Responses

This chapter contains the key objectives of the 2007 Plan, with a set of strategic responses to each objective that is drawn from the background research detailed in Chapters 2-4. The Plan, along with issue specific plans, graphically represents the preferred strategy for retail, commercial and residential development in the towns.



2 Sustainable Development for Torquay and Jan Juc

What is Sustainable Development?

Sustainability has typically been broken down into environmental, social and economic components. In 1987, the World Commission on the Environment (WCED) published a report 'Our Common Future' which defined the concept of sustainable development as:

"Sustainable development is development that meets the needs of the present without compromising the ability of future generations to meet their needs".

In 1992, Australia published a National Strategy for Ecologically Sustainable Development, which chose the following definition for Ecologically Sustainable Development (ESD)"

"using, conserving and enhancing the communities resources so that ecological processes, on which life depends, are maintained, and the total quality of life, now and in the future, can be increased."

The National Strategy for Ecologically Sustainable Development is a broad policy that sets the scene for changes in direction, and a re-evaluation of priorities, by all levels of government to ensure that all future development is more sustainable. It provides a framework for the preparation of more localised environmental management strategies.

Of particular relevance to the Torquay and Jan Juc Structure Plan are the following objectives of the *National Strategy for ESD*, listed under the heading of Urban and Transport Planning:

1. *To promote urban forms which minimise transport requirements, and improve the efficiency of land supply and infrastructure provision.*
2. *To encourage future development of urban transport systems which provide opportunities to limit the use of fossil fuels.*
3. *To promote subdivision and road design patterns that provide the greatest potential to utilise energy efficient dwelling design, with provision for and use of public transport modes.*
4. *To improve the amenity of urban areas.*

The National Strategy for ESD has led to the preparation of various State and Commonwealth strategies that seek to address specific issues such as reducing greenhouse gas, with relevant land use issues referred to in local Planning Schemes. The principles of sustainable development are integrated with the State Planning Policy Framework (SPPF) of the Surf Coast Planning Scheme, which states as a goal that:

"The State Planning and Policy Framework seeks to ensure that the objectives of planning in Victoria are fostered through appropriate land use and development planning policies and practices which integrate relevant environmental, social and economic factors in the interests of net community benefit and sustainable development."

Sustainable Development in the Context of Torquay Jan Juc

Victorian Coastal Strategy

Torquay and Jan Juc are wholly within the catchment of the coast, and hence the 2002 '*Victorian Coastal Strategy*' is a key document that will influence decision making with respect to all aspects of the growth and development of these towns. The Victorian Coastal Strategy (VCS) uses a hierarchy of principles for coastal planning and management that provide a pathway for decision making that leads to triple bottom line outcomes. The priorities of the hierarchy of principles (for decision making) are:

1. *provide for the **protection of significant environmental features**;*
2. *ensure the **sustainable use of natural coastal resources**;*
3. *undertake integrated planning and provide **direction for the future**; and*
4. *when the above principles have been met, facilitate **suitable development on the coast** within existing modified and resilient environments where the demand for services is evident and requires management.²*

The VCS acknowledges that a significant proportion of the Victorian population lives within the coastal zone, and aims to provide direction for the location and scale of use and development on the coast. In this context, existing settlements (activity nodes) such as Torquay and Jan Juc are identified as having opportunity to provide for development within defined limits (both in extent and intensity) to protect areas of environmental significance and to preserve areas between settlements in non-urban use. It is expected that any such development should meet the ecologically sustainable development principles for coastal planning and management which, in simple terms, the Strategy describes as "*development which aims to meet the needs of people today without compromising the ability of future generations to meet their own needs.*"

The 2004 '*Great Ocean Road Region Strategy*' builds upon the VCS through focussing on the sustainable development of the region through balanced and managed growth of selected towns along the coast and inland. The Strategy is built around four key directions:

Environment: *Protect the landscape and care for the environment.*

Settlement: *Manage the growth of towns.*

Access: *Improve the management of access and transport.*

Prosperity: *Encourage sustainable tourism and resource use.³*

The implementation of the Great Ocean Road Region Strategy is a means to contribute significantly to the Victorian Coastal Strategy's objective to plan and manage the use of Victoria's coastal resources on a sustainable basis. In this context, the Strategy designates Torquay/Jan Juc as a 'gateway to the region and as a city with capacity for residential and visitor accommodation growth and community services'. Torquay/Jan Juc therefore has an important role in accommodating sustainable development in a regional context.

Torquay/Jan Juc Growth Accommodation

Having confirmed the policy direction for Torquay Jan Juc as a growth settlement, the purpose of the 2007 Plan is to provide strategic direction on achieving development and growth in an ecologically sustainable manner. In a broad view, while some growth can be accommodated through increased densities of development in more established parts of the towns (currently approximately 12% of new housing is a result of medium density development), the majority of new households will establish on greenfield sites at the periphery of Torquay.

There has been no examination of how large Torquay should grow, or what its ideal size should be, or what the ESD limits might be. The Torquay Jan Juc Framework Plan (refer Plan 3.1) sets 'urban growth limits' for the north, east and south-west boundaries of the town and indicates a long term

² Victorian Coastal Strategy 2002.

³ Great Ocean Road Region. A Land Use and Transport Strategy, 2004.

growth corridor along the Spring Creek valley extending west of the town with no defined limit. It is legitimate that thinking and discussion on this question of 'how large should Torquay Jan Juc grow?' should commence as part of this study, if only in terms of broad sustainability principles, to set some parameters for examination of growth both within the settlement boundary and along the long term growth corridor.

The 2007 Plan does not propose any change to the current 'urban growth limits', or settlement boundary depicted on the Framework Plan, with vacant land in existing corridors (north to South Beach Road and east to Duffields Road) sufficient to absorb projected growth up to approximately 2025. Of importance is the opportunity to maximise the use of existing development corridors through encouraging well designed medium density development that is consistent with the preferred character of Torquay, and new subdivision on greenfield sites that maximises sustainable development outcomes.

The balance of Chapter 2 examines environmental improvement, social progress and economic health – the essential components of sustainability, and how they may be implemented in the Torquay Jan Juc context.

Environmental Improvement

Sustainability in the built and natural environment of Torquay and Jan Juc will be achieved through resource conservation measures primarily by focusing on biodiversity conservation, reduction of greenhouse gas emissions, treatment and management of stormwater run-off and water conservation.

Biodiversity Conservation

The '*Victorian Biodiversity Strategy – Our Living Wealth*' (1997) was prepared under the *Flora and Fauna Guarantee Act 1988*, and includes objectives for the conservation and management of biodiversity in Victoria. Biodiversity Action Plans have been prepared for different bioregions, identifying actions for conservation of biodiversity at a more localised level. They complement '*Victoria's Native Vegetation Management – A Framework for Action*' (DSE, 2002) which establishes the strategic direction for conserving the native vegetation component of biodiversity. The '*Biodiversity Action Planning, Landscape Plan for Zone 3 Gherang, Otway Plain Bioregion*' sets out a range of priority actions for the Torquay Jan Juc area, including to:

- Protect areas supporting threatened Ecological Vegetation Classes (EVCs) on private land, with priority given to remnants of the 'Grassy Woodland' and 'Swampy Riparian Woodland' along Spring Creek.
- Protect and enhance threatened EVCs on public land, with priority to the Breamlea Flora and Fauna Reserve and 'Coastal Headland Shrub' along the foreshore.
- Implement Action Statements for threatened species and plant communities.
- Develop habitat links through roadsides and streams to link remnants on private and public land.

The 2007 Torquay and Jan Juc Structure Plan responds to these strategies by placing priority on the protection of sites supporting significant biodiversity. Vegetation and habitat assessments carried out in Torquay and Jan Juc over recent years (detailed in Chapter 3) have ensured that the Plan is responsive to underlying ecological values. These values influence the design and densities of development (both broadhectare and infill) through the form and application of planning controls prepared in response to the key objectives of the Plan.

In many cases, the protection of flora and fauna values is complementary to social benefits of providing public open space and recreation for residents of Torquay and Juc. One example of this approach is the establishment of landscape buffers between Spring Creek and adjoining residential development, and utilising them as an open space and pedestrian/bicycle link.

Limiting Greenhouse Gas Emissions

The '*Victorian Greenhouse Strategy*' (VGS) was released in 2002 as the local response to the National Greenhouse Strategy (1996), and identifies that the transport sector is a significant

contributor to Victoria's greenhouse gas emissions. In 1999, transport was responsible for 16% of the State's total emissions. Torquay and Jan Juc are not serviced by rail, and rely upon a limited bus network for public transport. Car based travel will therefore continue to be the dominant mode of transportation relied upon by both the tourism industry and the work force for journeys to work outside of town (eg Geelong).

The VGS also identifies the relationship between the extent of motor vehicle use and urban form, including:

- Relative location of housing and activity centres (eg. employment, shops, schools, sporting activities)
- Design of subdivisions
- Availability and relative attractiveness of different transport modes

The metropolitan strategy for Melbourne '*Melbourne 2030 – Planning for Sustainable Growth*' places strong emphasis on sustainable development at the urban fringe through integration of land use and transport infrastructure. The 2006 Plan responds to this issue by:

- Encouraging higher densities of residential development around the Torquay Town Centre and neighbourhood centres in newly developing greenfield areas.
- Putting priority on the establishment of more effective bus services to both existing and newly developing areas.
- Maximising employment opportunities within Torquay through support for further consolidation and expansion of the existing Town Centre at Gilbert Street and establishment of an industrial estate north-west of Torquay.
- Encouraging walking and cycling through the creation of high amenity streets in new subdivisions, linked with open space and recreation facilities, retail and community centres and employment opportunities.

While there is little alternative to car based travel external of the towns in the foreseeable future, the Strategy aims to reduce the number of local trips by promoting accessibility to economic and social activities by walking and cycling, as well as focussing on improvements to the bus service.

The State Government has introduced a requirement for all new dwellings to be built to a five star energy rating to reduce consumption of energy and thus carbon dioxide producing fossil fuels. Subdivision design in new estates will be required to achieve suitable north-south and east-west orientation of streets to maximise opportunities to design for passive solar heating/cooling to assist in achieving the required energy rating. In this regard the cooling opportunities of late afternoon sea breezes is an important design element for any coastal town.

Opportunities also exist to encourage more energy efficient public lighting.

Managing Stormwater Run-off – Water Sensitive Urban Design

The concept of Water Sensitive Urban Design (WSUD) has emerged in Australia over the past 10-15 years, and aims to integrate urban planning and design with management of the urban water supply. WSUD offers an alternative to traditional stormwater management approaches in that it minimises the area of impervious surfaces and disruptions to the natural water balance through on-site and temporary storage of water. It assists in managing floods due to lesser off-site flows in peak rain events and improves the quality of stormwater entering waterways and the coast.

Under the WSUD model, the total drainage system comprises a network of open channels and retarding basins that reduce peak flow rates. The system incorporates a range of treatments to assist with water infiltration and pollution filtration. Drainage reserves and associated retarding basins have benefits in addition to protecting residential development from flooding. They also have habitat value and contribute to the landscape amenity and link activity centres with pedestrian and cycle paths.

An Urban Stormwater Management Plan was prepared by the Surf Coast Shire in 2002 that adopts WSUD as a principle for design of stormwater systems in new residential subdivision. On-site

detention of water has been recently incorporated into the 'Torquay Sands' and 'The Quay' estates in the Torquay North corridor, and contrasts with the traditional method of piping stormwater discharge to Deep Creek as in the older Wombah Park estate. The 2006 Plan complements State initiatives of requiring rain water tanks to be installed in new homes, and for minimum areas of residential sites to have permeable surfaces. WSUD principles will be applied to all new development in Torquay and Jan Juc.

Water Conservation

The prolonged drought and implications of less rainfall in the region due to global warming has belatedly brought the issue of sustainable potable water supplies to the forefront at all levels of government. The Geelong Region is currently afflicted with Stage 4 water restrictions, and is becoming increasingly dependent on ground water to supplement its water reserves. The Barwon Water '*Water Resources Development Plan*' (2003) puts high priority on re-use of water, along with other water saving measures, to ensure that adequate water is available to meet the future water needs of residents in the Geelong region. This approach has been taken in preference to the creation of new water storages which would have higher potential to adversely affect the environmental values of waterways in the catchment.

There is high potential for use of recycled water in Torquay and Jan Juc due to their close proximity to the Black Rock Water Treatment Plant at 13th Beach. A joint study by Barwon Water and Surf Coast Shire in 2004 confirmed this potential, particularly for the use of recycled water supplied by a third pipe for the flushing of domestic toilets and watering of gardens. However, progression of the treatment and reticulation of re-use water is currently being hampered by the legislative role of water authorities to only provide potable water. This is an issue that needs redressing at the State level. As such, Barwon Water's efforts are focussed on reducing water use, through encouraging the installation of water saving devices and encouraging mandatory water tanks with new houses. While this should be supported, options for household and public use of recycled water should nevertheless continue to be pursued. In this regard, the development of schemes to provide re-use water for maintaining active open space reserves within the Surf Coast, and Torquay in particular, is progressing with Government funding and co-operation with Barwon Water.

Potential also exists for use of stormwater detained on-site within larger subdivisions in the watering of reserves and public open space. Further opportunity exists for larger residential or commercial developments within the Torquay Jan Juc area to incorporate on-site detention and re-use of stormwater into the design of buildings and open space.

Economic Health

The 2007 Plan acknowledges the importance of optimising local employment opportunities to complement the growth in the population of Torquay and Jan Juc. As noted earlier, provision of employment within the towns that is close to residential areas and enhancement of accessibility by walking and cycling are important factors in reducing the number of local motor vehicle trips, and thus greenhouse gas emissions, as well as for achieving social benefits.

Retail Growth & Consolidation

The 1999 '*Torquay Town Centre Retail Strategy*', and subsequent 2005 '*Torquay and Jan Juc Retail Strategy Review*' have identified the potential for optimising local jobs growth by increasing local retail spending and reducing escape expenditure to other areas such as Waurn Ponds. They have highlighted the need to consolidate the existing Town Centre at Gilbert Street and provide for expansion of the Centre to accommodate an increased range of convenience shopping needs and services as a means of achieving this outcome. The reports indicate that alternative strategies of allowing retail development in fragmented locations around Torquay would fail to achieve this objective.

The 2007 Plan acknowledges the key role of the Torquay Town Centre in maximising local employment opportunities in the retail sector, and flags development of the former Primary School site in Bristol Road with a non-food related 'anchor' development as a key means of accommodating future retail floor space demand. The Plan also provides for a small neighbourhood centre in Torquay North

to meet convenience needs, whilst flagging a long term need for a new neighbourhood activity centre in Torquay West. It further allows for continued growth of tourist related retail floor space along the Surf Coast Highway.

Commercial/Industrial Opportunities

The development of local industry in Torquay complements strategies to enhance growth in retail employment opportunities, by reducing the number of trips by residents into Geelong to and from work, and therefore reducing retail spending at locations other than Torquay.

The 2007 Plan provides for new industrial development north-west of Torquay in a greenfield location following rezoning of land to Industrial 3 Zone in 2004. The Strategy also flags future expansion of that zone in a north-westerly direction subject to further investigation as demand warrants.

Social Progress

Key social issues sought to be addressed through the 2007 Plan focus around developing accessible neighbourhoods that include a community focal point and which provide a choice through housing diversity and housing affordability. These latter two are further informed through Council's Housing Strategy 2006.

Well Connected Neighbourhoods

A key principle relevant to sustainable development in Torquay and Jan Juc is the concept of walkability, and catering for non-motorised traffic such as bicycles. An important priority of the 2007 Plan is to ensure that new residential estates are highly pedestrianised and have a mix of integrated quality open space and community facilities. Well connected pedestrian and bicycle paths through drainage reserves and public open space, as well as high amenity streets, should promote social activity between residents and contribute to enhanced health and safety of residents. Walking and cycling are considered important in reducing the risk of heart disease, stroke and obesity, and well designed/located paths can significantly increase safety of users. Both the Public Open Space Strategy (2004) and Pathways Strategy (2005) make recommendations that have been included in the 2006 Plan.

The 2007 Plan encourages street layouts where parks and reserves are adjoined by streets with houses fronting them, as opposed to abutting the rear fences of allotments. This increases safety for residents and encourages greater use of the parks.

Community Hubs

Aligned with the principle of connectivity is the optimisation of destination points that present strong attraction, encourage interaction and efficiency of trips. Community hubs that bring together a range of community facilities and activities will be promoted and planned for in the 2007 Plan. Through appropriate siting and design these hubs will act to provide a focal point for neighbourhood life and activity, provide opportunities for the efficient and shared provision of resources, reduce car trips, integrate with pathway networks and ensure equitable accessibility to a range of community infrastructure to meet the needs of existing and future residents.

Housing Diversity

The *Surf Coast Housing Strategy, 2006* has confirmed the lack of diversity in new housing being provided by the market in Torquay / Jan Juc despite population projections by ID Consulting identifying that by 2011 there will be an increase in all types of household, with emphasis on the aged. The 2007 Plan encourages a greater diversity of housing types to increase the extent to which housing for different socio-economic groups including single person households and aged housing (small single storey dwellings, strata title apartments / studios etc) are made available, particularly close to the Town Centre in Torquay and other activity nodes.

Housing Affordability

Housing affordability is another important aspect of sustainability. From a land use perspective, ensuring an adequate supply of residential land is made available for development in the designated growth corridors will be important to avoid the price impact of restricted land supply. Ensuring a supply of zoned land in separate locations should assist in maximising price competition while providing choice.

A priority action coming out of the Housing Strategy is to commission the development of a Surf Coast Affordable Housing Strategy to achieve a significant increase in the supply of affordable housing options in response to identified needs within the Shire. The 2007 Plan will need to be adaptive to incorporate any recommendations arising from such study.



3 Torquay and Jan Juc in Context

Site Description

The Surf Coast Shire stretches along the coast from Torquay to Lorne, and encompasses the rural hinterland including parts of the Great Otway National Park and Winchelsea. Its population in 2001 was 20,872, of which 10,485 was attributable to Torquay / Jan Juc and surrounding areas. By 2006 this population was estimated to have grown to 24,124⁴. The adjoining towns of Torquay and Juc are separated by Spring Creek and the Torquay golf course, and accessed from Geelong by a dual lane carriageway. Torquay is physically separated from Geelong by the Thompson Creek valley and Mt Duneed. The Great Ocean Road (in name) commences at Jan Juc and joins the Anglesea Road at Bellbrae.

The central part of Torquay on the east side of the Surf Coast Highway – known as ‘Old Torquay’ - is the original settlement and generally comprises large sized allotments with small beach houses, many of which have been redeveloped in recent years for medium density housing. Housing estates have expanded to the north-east of Torquay since the 1980s, (north of Deep Creek), including the recently established ‘Torquay Sands’ golf course development which abuts the Breamlea and Karaaf wetlands.

Land west of the Highway towards Duffields Road has also been developed for housing in recent decades, with commercial development generally associated with the surfing industry along parts of the Highway frontage, including the Surf City retail complex and a service business estate off Beach Road. A civic precinct has developed south of Grossmans Road that includes a new primary school, the municipal offices, a child care/kindergarten facility, and an aged care hostel and retirement village. Low density residential estates exist north of Grossmans Road and South Beach Road, with more recent subdivision to the north-west between Coombes Road and Grossmans Road.

The Torquay foreshore is used for recreational purposes, including a surf beach to the south, Fishermans Beach to the east (divided by Point Danger) and a foreshore caravan park abutting Bell Street. Bell Street is a tourist precinct containing the Torquay Hotel and a number of cafes, restaurants and shops. The primary retail centre is located at Gilbert Street, south of Taylor Park, comprising two large supermarkets, shops, cafes and offices. Land at the eastern end of the centre fronting The Esplanade, as well as the former primary school site is zoned commercial but is yet to be redeveloped.

The ‘Old Torquay’ area has a low to medium vegetation cover, including scattered remnant Moonah and Bellarine Yellow Gum, however new residential estates to the north and east have relatively little vegetation cover and development is more exposed.

Jan Juc is situated on the south side of the Great Ocean Road, west of Spring Creek, and is almost fully developed, with most recent in-fill development occurring around Strathmore Drive. The town has a medium tree cover in places, with more substantial native vegetation cover to the west. A small local shopping centre is located adjacent to the foreshore and Jan Juc beach. Low density residential

⁴ I D Consulting demographic estimates for Surf Coast Shire.

subdivision exists to the west of the town along Bells Boulevard, forming a boundary to urban development. The Bells Beach surfing reserve is situated to the south-west of Jan Juc.

Torquay / Jan Juc have a strong surfing culture that has profoundly influenced the social, economic and environmental development of the towns since the post-Second World War period. Torquay is the birth place of such renowned surfing brands as 'Rip Curl' and 'Dive and Surf' and other brands quickly established themselves in Torquay as manufacturers and retailers, including Pat Morgan, Klemm Bell and Quiksilver.

Planning History

Geelong Regional Development Strategy (1988) and Torquay Jan Juc Structure Plan (1992)

Prior to 1993, planning for the towns of Torquay and Jan Juc was undertaken by the Geelong Regional Commission (GRC). The '*Geelong Regional Development Strategy*' published in 1988 established an overall framework for planning and development in the region, and shaped the development of the towns by designating them as preferred centres for urban growth on the coast and restricting urban expansion of other coastal towns. It identified potential for growth north and west of Torquay (to Duffields Road), and limits to urban growth south-west of Jan Juc and east of Torquay (towards the wetlands in the direction of Point Impossible). Potential for long term urban growth was identified between Grossmans Road and Great Ocean Road, west of Duffields Road. The GRC prepared a more detailed structure plan for Torquay Jan Juc in 1992 based on the 1988 Framework Plan.

Comprehensive Strategy Plan for Torquay Jan Juc 1996

Following amalgamation of the South Barwon and Barrabool municipalities in 1994, the Surf Coast Shire assumed responsibility for both Torquay and Jan Juc and undertook the 1996 '*Comprehensive Strategy Plan for Torquay Jan Juc*'. The Strategy, (shown as a Framework Plan in Plan 3.1), provided for population growth from 5,500 to 10,000 by 2011, at an annual growth rate of 3.6%.

With respect to residential growth, the Strategy recommended that:

- Urban consolidation be promoted in all residential areas, but particularly in 'Old Torquay', with in-fill development on remaining vacant land in Jan Juc.
- Two residential growth corridors be developed to maintain competition and locational choice in the market. It recommended that:
 - Growth in the Torquay North corridor continue up to South Beach Road, with a neighbourhood activity centre to service new residents.
 - Growth in the Torquay West corridor continue west up to Duffields Road, and that investigation take place as Torquay West is approaching full development as to the appropriateness of extending development further westwards.

In relation to rural residential development, the Strategy recommended that:

- The potential for reducing the minimum subdivision lot size of land between Deep Creek and Coombes Road down to 0.4ha be investigated.
- Council liaise with the owners of existing rural residential properties between Grossmans Road and Deep Creek regarding possible re-subdivision to smaller urban density lots.
- Land to the west of Messmate Road and north of Coombes Road (south of the ridgeline), and land bounded by Grossmans Road, Messmate Road, Ghazeepore Road and Coombes Road, be investigated for suitability as low density residential estates.

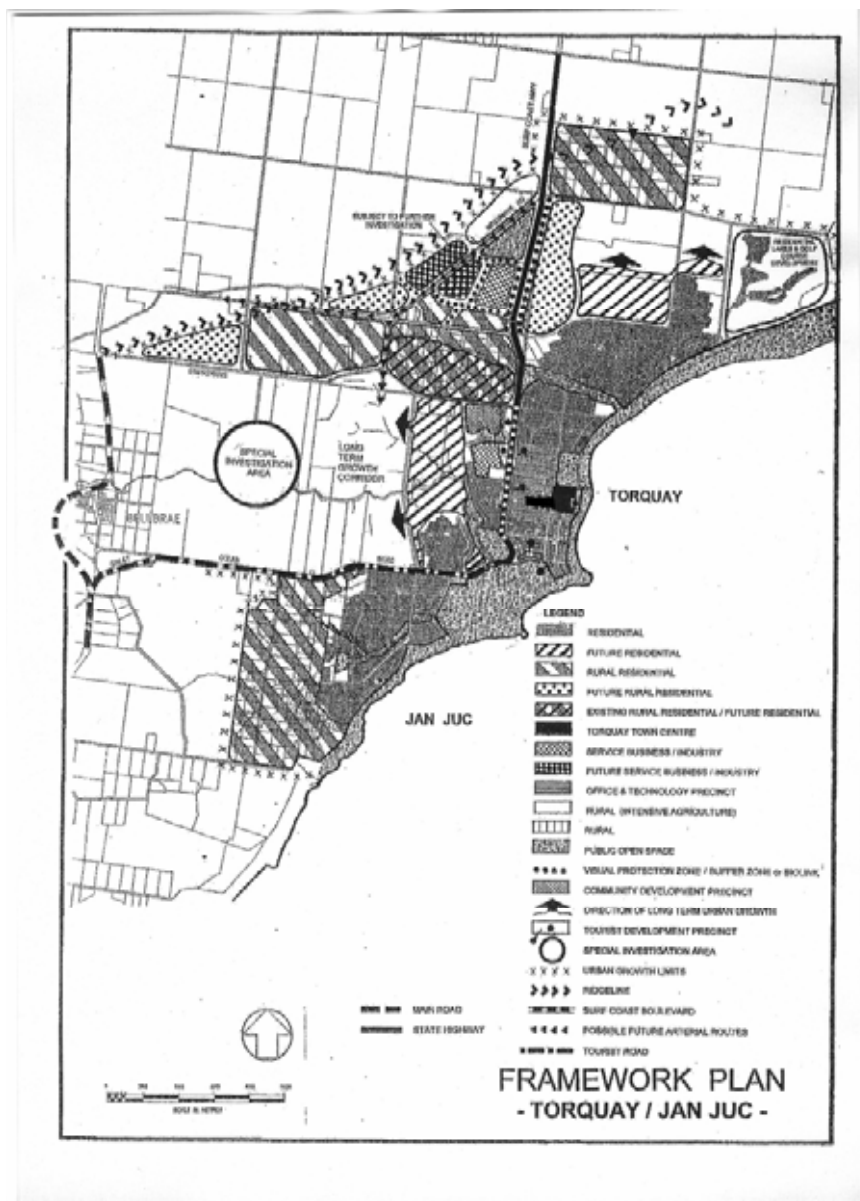
The Strategy confirmed the preferred approach of the 1992 Structure Plan of consolidating and reinforcing the existing Town Centre at Gilbert Street as the commercial heart of the town, recommending that further land to the north and east of the centre be rezoned to accommodate expansion. The Strategy encouraged long term incremental growth in the westerly direction towards the Surf Coast Highway, including the Torquay Primary School site, with a primary goal being to maximise local employment opportunities by reducing escape expenditure to other regional centres

such as Waurm Ponds. It also recommended that tourist related development, including tourist retailing, be encouraged along the Surf Coast Highway (including at Surf City), Bell Street, Gilbert Street and The Esplanade. Neighbourhood activity centres in new growth areas were supported provided that retail floor space was limited to serving convenience needs only, thereby preserving the primacy of the Gilbert Street centre.

The 1996 Strategy Plan recognised the shortage of industrial land in Torquay, and recommended that to maximise local growth in employment a new industrial estate should be established north of Coombes Road, west of the Surf Coast Highway.

The 1996 Comprehensive Strategy Plan was reflected in the Surf Coast Planning Scheme as the Framework Plan at Clause 21.10 and defined a formal edge to the towns of Torquay and Jan Juc, based on the findings of the 1996 Plan. Analysis of residential land supply indicated that undeveloped land within these boundaries could cater for anticipated population growth within the time frame of the strategy (ie to 2030) however, extension of the township west of Duffields Road would be required within this period to maintain a ten year land supply . Detailed planning for development in the Spring Creek growth corridor would also be necessary prior to any westerly extension commencing.

Plan 3.1 1996 Framework Plan for Torquay and Jan Juc (Amended 2005)



An audit of the implementation of the recommendations of the 1996 Comprehensive Strategy Plan is contained in Appendix 1 to this report. Despite the lack of any formal process to monitor the implementation of the above actions, a large majority of the actions have been actioned and are either completed, no longer relevant or are ongoing. Of the few actions that remain outstanding, the following are considered relevant to this review and preparation of the Torquay Jan Juc Structure Plan:

- Consider the implications of the Armstrong Creek Growth Corridor Strategy.
- Prepare a detailed ODP to create a “natural system” led land-use and circulation plan for the Spring Creek Valley (potential western growth corridor).
- Develop a Master Plan for The Esplanade incorporating urban design and traffic engineering treatments to reinforce a low speed environment along the route.
- Prepare a municipal funding policy.

Residential Rezoning and Land Supply

The 1996 Comprehensive Strategy Plan led to a number of Planning Scheme amendments to facilitate urban development in the towns.

An Outline Development Plan (ODP) was adopted for Torquay North in 1997, for the area bounded by the Surf Coast Highway, South Beach Road, Deep Creek and the boundary with ‘Torquay Sands’. It provided for Horseshoe Bend Road as a primary access route and a collector road joining it with the intersection of South Beach Road and Surf Coast Highway. It also planned for a neighbourhood activity centre comprising limited retail facilities, two sporting ovals, a post primary school and community facilities. Land along the Highway frontage was designated for larger rural residential sized lots to maintain a rural vista from the Highway entrance to the town. Amendment R29 in 1997 rezoned 35ha of land east of Horseshoe Bend Road to Residential 1 (R1Z), with the supply of residential lots now almost exhausted. A further 59ha was zoned R1Z in 2000 on the west side of Horseshoe Bend Road, with subdivision having just commenced (the ‘Quay’ estate). A further three land parcels exist within the ODP area which can be rezoned as demand warrants, including the land adjacent to the Highway. Minor modifications were made to the ODP in 2003.

An ODP was prepared for Torquay West in 2000 for the area bounded by Duffields Road, Great Ocean Road, Surf Coast Highway and Grossmans Road. It provided for relocation of the Torquay Primary School to Grossmans Road, establishment of a trunk collector road connection between Beach Road and Duffields Road, protection of flora and fauna values along Spring Creek with a public open space link, and a new sporting oval to the south of the new school site. Amendment R59, approved with the new Planning Scheme in 2000 rezoned the balance of land south of Spring Creek known as Great Ocean Views to R1Z - this land is currently being developed. Substantial land exists on the north side of Spring Creek which can be zoned for future residential development.

In addition, land fronting The Esplanade adjacent to the Breamlea wetlands has recently been developed as a golf course residential development comprising 700 lots (known as ‘Torquay Sands’). Amendment R24 in 1995 zoned it for that purpose (then known as the Golden Beach Resort Zone). The zoning changed to the Comprehensive Development Zone (CDZ1) with introduction of the new format Planning Scheme.

Amendment C2, also adopted with the new format Planning Scheme, rezoned 101ha of land between Grossmans, Messmate, Coombes and Ghazeepore Roads from Rural Zone to Low Density Residential Zone (LDRZ). The rezoned land was one of the sites recommended for investigation in the 1996 Comprehensive Strategy Plan. Further land was zoned LDRZ north of Coombes Road between Surf Coast Highway and Messmate Road (32ha) as part of Amendment C6 in 2004.

Amendment C26 was adopted in December 2005 to rezone part of the land between Deep Creek and Grossmans Road from LDRZ to R1Z in accordance with the 1996 Comprehensive Strategy Plan. This will commence the facilitation of the resubdivision of this area of land south of Deep Creek to a higher residential density to take advantage of the existing and available social and physical infrastructure in the immediate vicinity.

Land supply in Torquay is regularly monitored and reported on through the 'Torquay Jan Juc Residential Land Supply Analysis'. The most recent review of November 2005 estimates that the supply of residentially zoned land has progressively fallen over the past two years from around 12 to 7-8 years. This includes newly created vacant lots as well as broadhectare land. While the recent rezoning of part of the Briody Estate will add to this supply, further rezonings are necessary as soon as possible to ensure a healthy supply of residential land and a competitive residential market are maintained.

Neighbourhood Character

Considerable medium density housing development has occurred in 'Old Torquay' since the mid 1990s, consistent with the 1996 Comprehensive Strategy Plan, which has accelerated the change to the character of parts of that area that commenced around the 1960's. A neighbourhood character study for Torquay / Jan Juc commenced in 2003 to assess the current neighbourhood character of the two towns and to arrive at a preferred character through community consultation. The study included a community perception analysis conducted by Dr Green, which identified six neighbourhood precincts that the respondents to the survey indicated represented 'their neighbourhood.' Notwithstanding the number of precincts, Dr Green found that the characteristics of development the community perceived to be consistent with or detracting from the local character were the same characteristics throughout the study area. Hence the preferred character appears to be consistent across Torquay / Jan Juc despite some variations in existing character.

Based on the community perception modelling and a physical survey of the precincts, the draft study summarises the preferred neighbourhood character of the Torquay / Jan Juc township as:

Neighbourhoods of modest dwellings reflective of older style beach houses and other classic Australian style houses, or of more contemporary design that are balanced in terms of their articulation, form and colour. Set in well landscaped streetscapes, with large front setbacks and spaces between buildings, incorporating mature, indigenous vegetation which filters the visual presence of dwellings. Streetscapes are predominantly free of front fencing with recessive garages accessed by drives of natural surfaces.

The Study has just recently been adopted by Council. It raises concerns about the size, bulk and density of new single and medium density housing, mainly in Torquay, and the lack of space around such buildings for screening vegetation. The report recommends the introduction of additional performance criteria standards for new development throughout Torquay and Jan Juc that will seek to achieve:

- Greater retention of existing significant vegetation (both in terms of landscape and biodiversity value);
- Greater allocation of site area for landscaping, though prescribed front, side and rear boundary setbacks and maximum site coverage; and
- Reduced building bulk through prescribed plot ratio and adherence to the principles of 'surf coast design'.

Torquay Town Centre

Despite recommendations in the 1996 Comprehensive Strategy Plan to support rezoning in the Town Centre to provide additional retail floor space, community opinion was divided between this proposal and an application to establish a second major supermarket on the Surf Coast Highway. After much public debate and consideration of various draft retail strategies, Council adopted recommendations of the 'Torquay Town Centre Retail Strategy' by Essential Economics in 1999 to consolidate retailing in the Town Centre. The Advisory Panel that considered submissions to the new format Planning Scheme supported this position, and rejected the alternate Highway supermarket proposal.

Land at the eastern end of Gilbert Street fronting The Esplanade was rezoned to Special Use Zone (SUZ5) targeting the establishment of tourist retailing uses, and land bounded by Fischer Street and

Taylor Park was rezoned Comprehensive Development Zone (CDZ2), with provision for a second major supermarket and office development along Zeally Bay Road. Direction was given in Clause 21.10 of the MSS indicating that future expansion of the centre would occur in a westerly direction up to and including the Primary School site. A Safeway supermarket was established in 2004 at the intersection of Bristol Road and Fischer Street in accordance with the intended strategy.

With relocation of the Bristol Road Primary School to Grossmans Road in 2002, and pending sale of the land by the State Government, the Council undertook a review of retail floor space demand titled the '*Torquay Retail Strategy Review 2003*'. The Review supported immediate extension of the Town Centre, including rezoning of all of the school site and residential land in-between, and led to Amendment C13 which rezoned the land to CDZ3 in 2004. The CDZ3 provides for retail and office development, a residential buffer along Boston Road, a town square and off-street car parking, subject to approval of an overall development plan. The rezoning thus implemented the longer term strategy in the 1996 Comprehensive Strategy Plan for development of the Town Centre, providing for forecast retail growth of the Town Centre within the period to 2021.

The '*Jump Starting the Heart – Town Centre Re-vitalisation Project*' was completed in 2001, and established recommendations for car parking and traffic management within the centre. Streetscape works proposed for Gilbert Street, including undergrounding of powerlines, have now largely been completed. A car parking precinct plan was proposed, but has been superseded by the '*Torquay Town Centre Car Parking Strategy*' which was adopted in 2006. This Strategy flags preferred locations for new parking (both public and private) in the centre and the collection of cash-in-lieu contributions to pay for publicly funded parking. The Town Centre Revitalisation Project also contained urban design guidelines for much of the Centre, which were complemented by guidelines prepared separately for land in the Special Use Zone fronting The Esplanade. The guidelines are currently under review.

Industrial Development

Recommendations from the 1996 Strategy Plan concerning industrial expansion were implemented in 2004 with the adoption of Amendment C6, which rezoned 26ha of land north of Coombes Road abutting the Surf Coast Highway to Industrial 3 Zone. A Development Plan Overlay (DPO) was introduced by the Amendment, specifying that:

- A landscaped Visual Protection Buffer to the Highway be established.
- A landscaped Environmental Buffer to Grass Tree Park be established.
- A landscaped Amenity Buffer be established between the industrial zone and adjacent low density residential zone.
- A biolink be created that connects Grass Tree Park with vegetation in Coombes Road.

Land south of the industrial estate was zoned LDRZ to provide a buffer to residential land fronting the south side of Coombes Road, and intentions for the long term extension of the industrial estate further westwards across Messmate Road were flagged in the Framework Plan forming part of Clause 21.10 of the MSS.

Surf Coast Highway

A '*Torquay Urban Design Framework*' was prepared in 1998 with recommendations relating to streetscape design, the road hierarchy, linkages, vistas and the open space network. Adoption of this Framework has led to removal of powerlines along part of the Surf Coast Highway, thematic native planting along the Highway, introduction of traffic signalisation, and implementation of co-ordinated Highway signage emphasising preferred traffic routes to community, retail and recreational facilities.

To achieve a co-ordinated design theme, the '*Surf Coast Highway Urban Design Guidelines*' were produced in 2003. The Guidelines divide the Highway into a number of precincts that reflect their different land use and built form, and establish preferred character objectives as well as performance measures relating to building heights, setbacks, landscaping treatment, fencing and advertising signs. A car parking precinct plan was prepared for the Surf City commercial precinct. The precinct based

Guidelines were introduced as a Design and Development Overlay to parts of the Highway in 2005 by Amendment C14 (Part A). Part B of the Amendment applying to the balance of the Highway was abandoned due to specific concerns of submitters. A subsequent Amendment C36 has recently been approved for the balance of the highway which addresses these earlier concerns. These provisions were prepared in acknowledgement of the significance of the Surf Coast Highway as a gateway to Torquay and promotes quality design and built form that is unique to Torquay.

Community Planning

A '2020 Vision' was developed for the Surf Coast Shire in 1995 following a thorough community planning exercise. The focus of this 'vision' was to achieve a balance between lifestyle, the environment and development. Key planning objectives were to ensure that growth occurs in designated towns, a green belt is maintained between towns, medium density development is encouraged where appropriate, the character of towns are retained and enhanced, development of town plazas is encouraged, significant roadside vegetation is protected, and tourism precincts are designated within the towns.

The '2020 Vision' was complemented in 2004 by the Surf Coast Shire Community Plan – 'Your Visions'. This Plan was developed following thorough community consultation, and identifies priorities for Torquay as being:

- Development and repair of footpaths, and an upgrade of sports and recreation facilities.
- Better access to the beach for all users.
- Development that is sustainable and integrated across all needs without destroying local character. Subdivision and high density housing is perceived to result in loss of character, with inadequate open space in new developments.
- Enhanced services, including establishment of a secondary school, improvements to public transport, accommodation for the aged, and a local cinema.
- Additional recreational activities encompassing a greater variety of sports. There is currently no multi-functional facility or adequate indoor pool.
- Improved parking facilities and traffic flows.
- Development of a new industrial estate and expansion of commercial zoning.

These issues are relevant to a review of the 1996 Comprehensive Strategy Plan for Torquay and Jan Juc.

Foreshore Master Planning

The Torquay and Jan Juc foreshore reserves are an intricate and key feature of the towns, providing one of the greatest attractions to people wishing to live at or visit the area. The beaches and foreshores have shaped the character of the towns and are interwoven in the daily life of the majority of the towns' residents. The recently created Great Ocean Road Coastal Committee of Management (GORCC) is responsible for the planning and management of the foreshore reserves within the Surf Coast Shire. This Committee is an amalgamation of the numerous committees that previously existed from Torquay to Lorne.

The GORC Committee has prepared an overall Environment and Land Management Plan to integrate management of the Coastal Crown land between Torquay and Lorne. Specific Management and Landscape Masterplans have also been developed for the Torquay and Jan Juc foreshore areas and each plan requires approval under the *Coastal Management Act 1995* for implementation. Each plan allows for the appropriate development of community infrastructure to maximise recreational opportunities, whilst protecting and enhancing the unique and sensitive floral, faunal, geological and cultural heritage values. In this regard the foreshore plays an important role in linking the community at both a physical and social level, whilst also providing significant habitat values and wildlife corridors in a picturesque landscape, and in contributing to township character. The integration of development and community infrastructure provision by both the Council and the Committee is essential in the holistic planning for the towns of Torquay and Jan Juc

Housing Strategy

The Surf Coast Shire Council has recently adopted a housing strategy which was an outcome of the “*Surf Coast Housing Policy Project, November 2006*”. The housing strategy will provide guidance in housing related decisions, and includes goals, objectives and strategies and an action plan to implement the Strategy. From a Shire wide perspective, the report identified the following key issues, against which influences for the development of Torquay / Jan Juc are noted:

Key Issues

Sustainability – Need to ensure the environmental, landscape and agricultural values of the Shire are protected, and that future development occurs in the most appropriate parts of the Shire.

Affordability – Affordability of both housing purchase and rental has reduced markedly in the Shire in recent years, with an imbalance in affordability between coastal and hinterland towns.

Diversity – The Shire contains a diversity of household types, but lacks a diversity of housing forms with a predominance of large family dwellings. Ageing of the population, in particular, will generate the need for smaller dwellings and other forms of accommodation.

Infrastructure, Services and Transport – Townships lacking reticulated services are restrained in providing housing, and public transport accessibility throughout the Shire is low.

Character – Need to ensure the character of townships is retained.

Influences on Torquay / Jan Juc

- Protect significant environmental and landscape values, such as the Karaaf wetlands, Bells Beach vista, creek and foreshore environs, and significant vegetation.
- Protect the agricultural opportunities north of Torquay arising from the availability of reuse water.
- Maximise the capacity of Torquay / Jan Juc to accommodate growth in an efficient and sustainable manner.
- Integrate a high level of ecologically sustainable design in new and existing urban form.
- Be responsive to opportunities to increase the supply of affordable housing and the provision of social housing and crisis/ transitional accommodation.
- Encourage the provision and range of employment opportunities for local residents.
- Encourage increased density and diversity of housing, particularly in central locations.
- Provide opportunities for housing needs of the elderly in accessible locations.
- Promote sustainable management, use and recycling of wastewater and rainwater resources.
- Place emphasis on health and well being in development design, with timely provision of community infrastructure and services.
- Increase the provision of open spaces, particularly active open space, connectivity throughout the town with pedestrian and cyclist linkages.
- Plan for improvements to the provision of public transport both within Torquay / Jan Juc and linking to the region.
- Give greater priority to pedestrian and cyclists in subdivision design.
- Balance growth with the retention of the essential elements of the identified and valued neighbourhood / landscape character values of Torquay / Jan Juc

Other Strategic Influences

State Strategic Frameworks

Within the framework of the hierarchy of principles discussed in Chapter 1, the 2002 '*Victorian Coastal Strategy*' acknowledges the role of Torquay and Jan Juc as an important growth node on the south-west coast, with capacity to absorb new population growth due to availability of infrastructure and lack of environmental constraints. It states that development pressure and infrastructure will be directed away from sensitive areas such as the smaller coastal towns of Anglesea, Aireys Inlet, Lorne, Moggs Creek and Fairhaven, and managed within defined activity centres such as Torquay which are significant population centres and able to be further developed while meeting the principles of ecologically sustainable development outlined in the Strategy.

The '*Central West Regional Coastal Action Plan, 2003*' builds on the VCS as a key strategic planning tool. Key strategic actions of the Coastal Action Plan that will influence the 2006 Structure Plan are:

- Ensure that coastal and marine issues are given high priority in planning schemes to ensure they protect and enhance coastal and marine values.
- Ensure that planning scheme give protection to:
 - areas of biodiversity significance;
 - areas of natural and cultural significance;
 - coastal areas of high risk and/or sensitivity; and
 - coastal catchments, estuaries, intertidal and marine areas.
- Continually improve the effectiveness of planning schemes to ensure that they clearly express future growth outcomes and expectations, including limitations, for townships along the coast taking into account social, economic and environmental impacts.

The '*Great Ocean Road Region Strategy*' released in 2004 offers a regional approach to planning along the south-west coast, and supports the Coastal Strategy and Coastal Action Plan by stating that urban growth will be managed by directing substantial new development to Torquay, Warrnambool and Apollo Bay, as well as to hinterland towns such as Winchelsea, Colac and Camperdown. It also notes the need for long term investigation of alternative routes for through traffic around Torquay.

In addition to these strategies, the State Government has recently released its *Coastal Spaces – Recommendations Report, 2006* which seeks to improve and clarify strategic planning and tools for managing sustainable coastal development in non-metropolitan coastal areas, to assist in implementing the *Victorian Coastal Strategy*. Some of the key issues it confronts that are pertinent to the Torquay Jan Juc Structure Plan include:

- Population Change – acknowledging the demand for growth in coastal towns and the trend in smaller coastal settlements for a greater proportion of their population to be near or past retirement age, leading to a changing mix of demands for services and facilities.
- Climate Change – noting the reality that for coastal regions, climate change-related impacts will occur and have the potential to be very significant – whether as increasing volatile weather conditions or the longer term issue of rising sea-level. To this extent, a precautionary approach to land use and development is recommended in areas likely to be more vulnerable, taking proactive intervention to direct long-term development and use away from likely vulnerable areas.
- Settlement Planning – encouraging the completion of detailed local level planning to determine the preferred and sustainable extent of a settlement to accommodate future growth and development opportunities. In this context, a Coastal Spaces initiative has been to develop a Settlement Boundaries Planning Practice Note to provide guidance on achieving a consistent approach to identifying and implementing settlement boundaries into local planning schemes.

Armstrong Creek Growth Corridor

The City of Greater Geelong has released its growth plan strategy for the Armstrong Creek area to the south of Geelong. This area, to the north of Mt Duneed is projected to accommodate up to 54,000 people and will have a significant impact on Torquay Jan Juc in relation to:

- Retail floor space. A new activity centre in the Armstrong Creek growth corridor would compete with retail floor space for supermarket and specialty shopping in Torquay, and may reduce the demand in Torquay for peripheral sales uses.
- Industrial demand. The planning for the provision of some 200ha of land for industrial use, much of which is likely to have good access to the Geelong Bypass Road, may impact on demand and development of the Torquay industrial estate.
- Transport. Opportunities arise for enhanced public transport links between Torquay and Geelong, whether by bus or rail. The Plan proposes a sub-regional transit route with possible connection to Torquay.

It is pleasing to note the delineation of the southern boundary to the growth area is north of Mt Duneed, which will ensure the landscape values of this area are protected. This will help reinforce the retention of the rural landscape between Torquay and the Mt Duneed / Armstrong Creek Urban Growth Area and the separation of these urban areas in line with Council policy.

The likely development scenario for the Armstrong Creek urban growth area has been taken into account in the development of the 2007 Plan, though the full extent of the impact will only become clearer with the passage of time.

G21 Geelong Regional Plan – a Sustainable Growth Strategy

G21 is an alliance of five Councils (Greater Geelong, Surf Coast, Colac Otway, Golden Plains and Queenscliffe) and more than 150 participating local organisations working together towards a common vision: "making the Geelong Region Australia's most desirable destination for living, visiting and investing – renowned for its vibrant, cohesive community, exceptional physical environment and vigorous economy".

Formed in 2002, the heart of G21 is a series of Pillar Groups representing priority interest areas of the Region including: Arts, Culture & Heritage, Community Safety & Security, Economic Development, Environment, Health & Wellbeing, Lifelong Learning, Research, Sport & Recreation, Telecommunications and Transportation.

The first major achievement of G21 was the development of the Geelong Region Strategic Plan in 2003. Developed through extensive consultation with the G21 Pillars, the Strategic Plan identified twenty-four key projects that needed to happen to enable the Geelong Region to take full advantage of the opportunities presented in the 21st Century. Since its launch in November 2003, twenty-one of the Projects are underway or complete and are presented in the G21 Region Report 2005.

The G21 Report identified the need for a Sustainable Regional Growth Strategy, focusing on land use and service and infrastructure planning to deliver a new set of priorities for the Region that look towards the year 2040 and achieving sustainable social and environmental outcomes as well as economic generation. Report 1 of the Regional Growth Strategy Plan presented an analysis of the regional context within which the G21 Region exists. It examined 'inter-regional' relationships rather than issues 'within' the Region. The second report seeks to provide an understanding of the Region and to identify the challenges for the future. This report is expected to be finalised later in 2007. The Regional Growth Strategy reflects the strategic land use planning directions of the Surf Coast Shire at the local level, but presents it in a wider regional perspective.

The Natural Environment

Waterways and Drainage

Torquay and Jan Juc fall within the Spring Creek catchment which covers an area of approximately 80km², spanning from the coast at Torquay/Jan Juc to west of Bellbrae. It includes three main sub catchment systems – Spring Creek, Jan Juc Creek and Deep Creek. The north-eastern part of Torquay is serviced by the Karaaf Wetlands system at Breamlea.

Spring Creek commences as two main branches west of Bellbrae, with narrow stands of vegetation along parts of its cleared length close to Torquay. An Environmental Significance Overlay applies to the section between Duffields Road and the creek's outlet at the Torquay surf beach. Jan Juc Creek has two main headwater branches, with the primary stem flowing from west to east through Jan Juc, and an outlet to the Jan Juc surf beach. It forms part of a linear passive recreation area through Jan Juc. Deep Creek enters the sea at the northern extremity of 'Old Torquay', and traverses a low density residential subdivision west of the Surf Coast Highway up to Messmate Road.

Both the Spring Creek and Jan Juc creek catchments in particular have moderate to steeply undulating landform, creating rapid run-off in main rainfall events and rapid fluctuations in stream flow. This can cause short term minor flooding in the lower reaches of the creeks. Mapping of the Flood Overlay and Land Subject to Inundation Overlay have been updated and applied to parts of the creeks in Torquay by Amendment C7 to the Surf Coast Planning Scheme.

Landscape and Visual Character

Torquay and Jan Juc are situated on undulating land that becomes less sloped away from the coast. Whilst much of the surrounding land is farmed and has been largely cleared of natural vegetation, there are a number of remnant roadsides and plantings along farm boundaries, with vegetation cover increasing close to the towns. A ridgeline to the north of Torquay acts as a visual barrier to residential development from the north, maintaining a distinctive rural landscape between Torquay and Mount Duneed.

The coastal edge is spectacular for its limestone cliffs and sandy beaches, particularly at Bells Beach south-west of Jan Juc, where the confluence of open farmland framed by remnant bush meets the ocean, with relatively few visible structures. The rolling hills of the Spring Creek valley to the west of Torquay towards Bellbrae township are also highly attractive.

The '*Landscape Assessment Study*' released with the draft '*Great Ocean Road Region Strategy*' in 2003 describes two key viewing points along the coastline as being from Bells Beach South and Bird Rock in Jan Juc, and rates the Bells Beach coastal landscape as being of national significance. It further rates the balance of the coastal landscape of Torquay and Jan Juc as being of state significance. The Study acknowledges the visual impact of new residential development on hilltops in both towns that have little vegetation to screen buildings.

Flora and Fauna

Land around Torquay and Jan Juc once supported an array of vegetation communities. The Ecological Vegetation Classes that existed prior to settlement include:

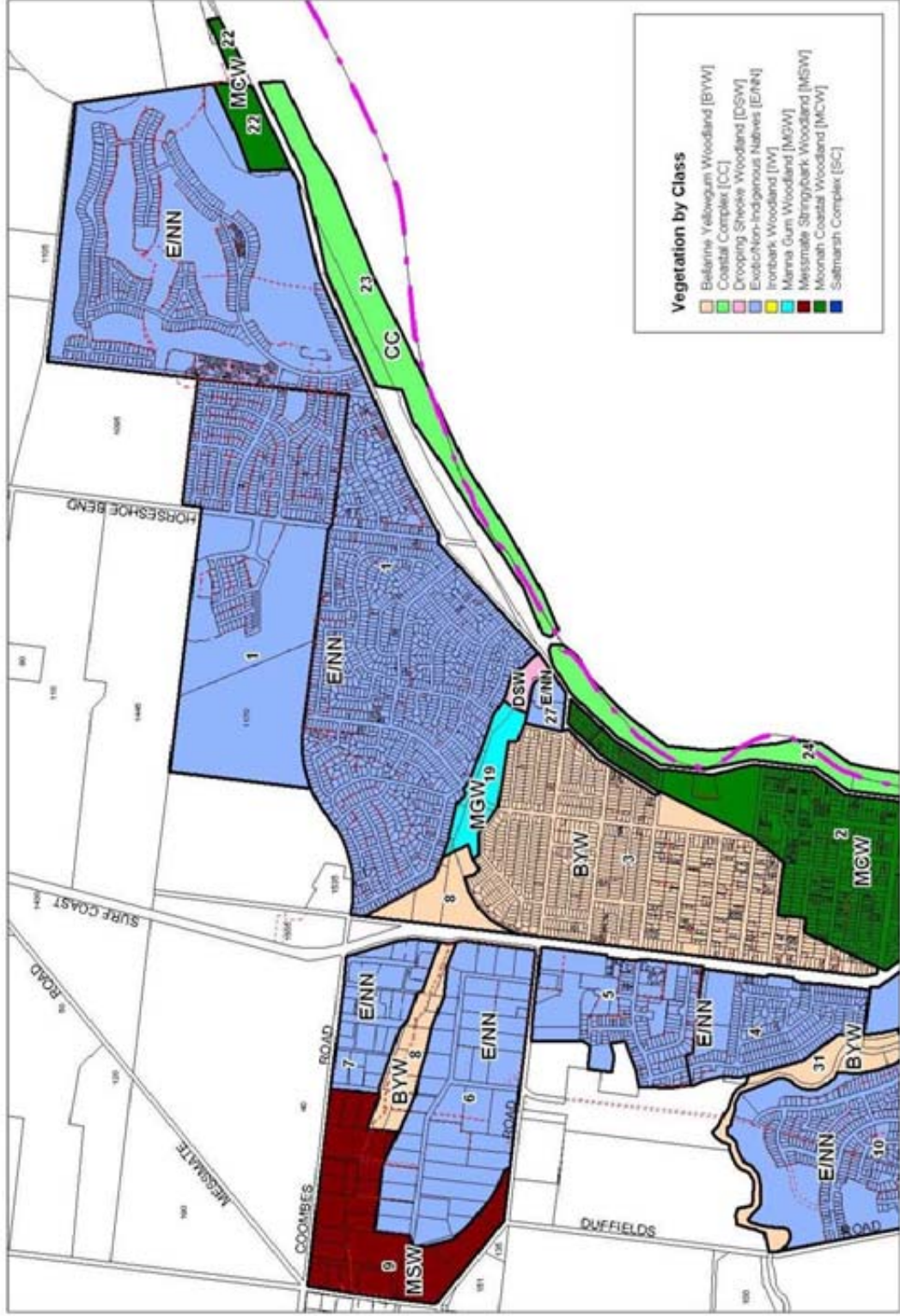
Ecological Vegetation Class (EVC)	Location
Heathy Woodland/Sand Heath Mosaic	North west of Torquay, including Grass Tree Park and land on the eastern side of the Highway in Torquay North.
Grassy Woodland	Large area of Torquay and Jan Juc townships, including the growth corridors to the north and west of Torquay.
Coastal Headland Scrub	Along the southern coastline of Torquay, and the Spring Creek estuary.
Calcarenite Dune Woodland	Along the Torquay Foreshore between Point Danger and Deep Creek, and along the foreshore east of Torquay up to Breamlea and the lower reaches of Spring Creek.
Coastal Dune Scrub Mosaic	Along the coastline north of Torquay.
Wet Heathland	Immediately east of the Torquay Sands golf course , including the Breamlea wetlands.
Shrubby Dry Forest	Parts of west Jan Juc including Bells Boulevard
Lowland Forest	South western corner of Bells Boulevard
Swampy Riparian Woodland	Along upper reaches of Spring Creek from the east side of Duffields Road

Much of the original vegetation has been removed for farming or township development, with only small patches of remnant vegetation remaining. The 'Surf Coast Shire Rural Environment Study: Report on Environmental Resources' (2000) identified a number of sites of biological significance, comprising:

- Heathy Woodland north-west of Torquay North at Grass Tree Park and in three patches in the vicinity of Coombes Road.
- Moonah Shrubland along Spring Creek.
- Yellow Gum (remnant of the Grassy Woodland EVC) north-west of Jan Juc.
- Calcarenite Dune Woodland, Coastal Salt marsh Complex and Swampy Riparian Complex at Breamlea Salt Marsh east of the 'Torquay Sands' golf course development.
- Shrubby Dry Forest at the southern end of Bells Boulevard, Jan Juc.

Mapping of vegetation within the existing Torquay and Jan Juc urban areas was undertaken by Mark Trengove in 2003 in conjunction with the Torquay and Jan Juc neighbourhood character study. The 'Torquay and Jan Juc Vegetation Study 2003' mapped and identified the remnant vegetation communities in the Torquay Jan Juc area and assessed their conservation significance. All of the sites of environmental significance are described in Table 3.1 and are mapped on Plans 3.2a and 3.2b.

Plan 3.2a: Vegetation Types – Ecological Vegetation Class (EVC) & site reference numbers



Plan 3.2b Vegetation Types – Ecological Vegetation Class (EVC) & site reference numbers

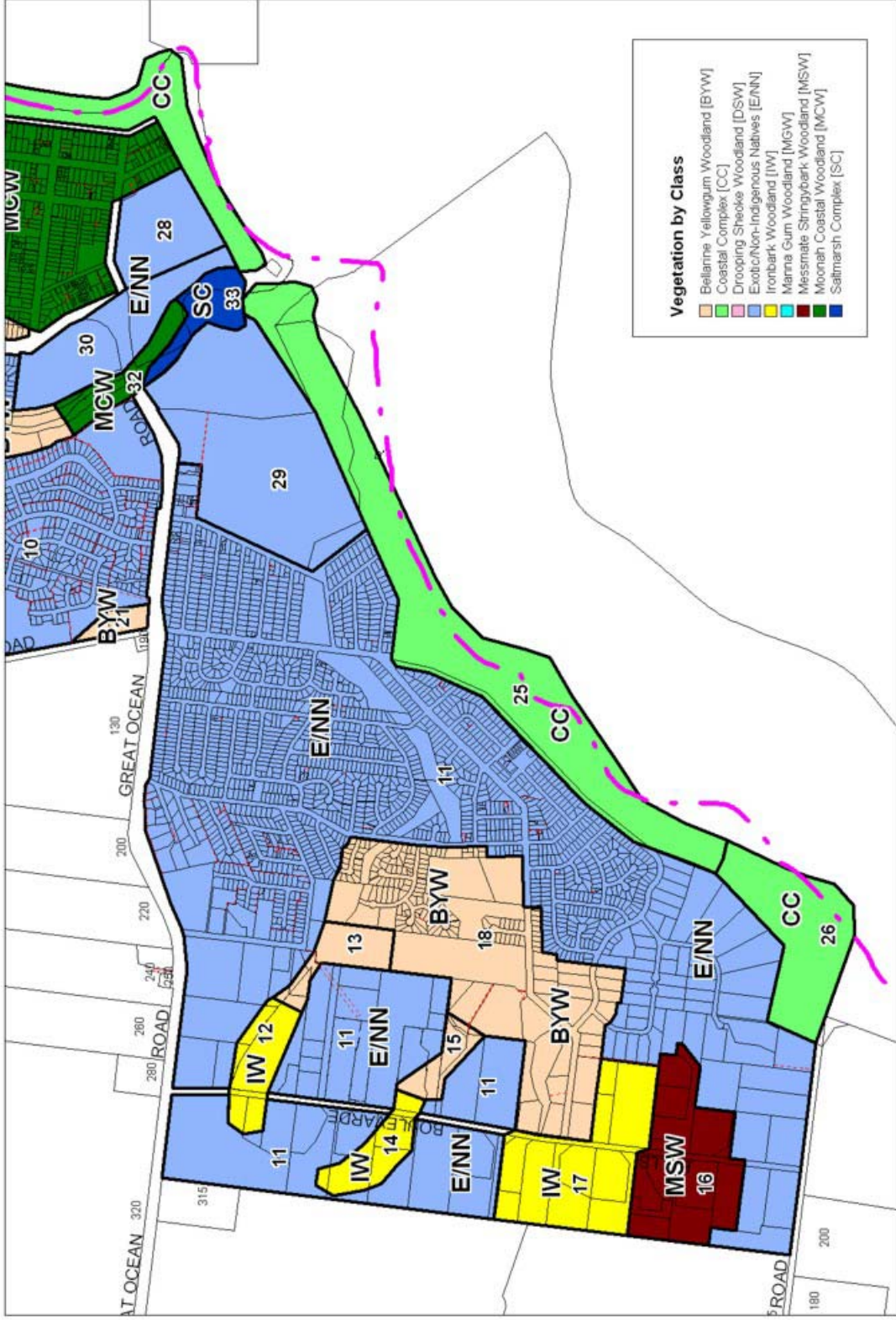


Table 3.1 Remnant Vegetation Conservation Significance

Vegetation Community	EVC	Location	Conservation Significance
<p>Bellarine Yellow Gum</p> <p>Individual and intact populations including Manna Gum, Ironbark, Moonah and Drooping Sheoke.</p>	Grassy Woodland	<ul style="list-style-type: none"> ▪ Northern part of 'Old Torquay' ▪ Deep Creek, central Jan Juc, Spring Creek and Duffields Road 	High regional State
<p>Moonah Coastal Woodland</p> <p>Dominated by Moonah with Drooping Sheoke</p>	Coastal Dune Scrub Mosaic	<ul style="list-style-type: none"> ▪ Within the foreshore and adjoining residential parts of Old Torquay, particularly to the south. ▪ Within Spring Creek and adjoining Torquay Sands. 	Regional State
<p>Messmate Stringybark Woodland</p> <p>Open woodland dominated by Messmate Stringybark and scattered occurrences of Manna Gum, Swamp Gum, and Narrow Leaf Peppermint</p>	Heathy Woodland	<ul style="list-style-type: none"> ▪ Coombes Road area and Bells Boulevard 	High regional
<p>Ironbark Woodland</p> <p>Open Woodland dominated by ironbark with scattered occurrences of other gums such as Bellarine Yellow Gum and Messmate Stringybark</p>	Shrubby Dry Forest	<ul style="list-style-type: none"> ▪ Three patches around Bells Boulevard in Jan Juc 	High regional

The study '*Remnant Roadside Vegetation of the Surf Coast Shire*' (1997) assessed the conservation significance of vegetation in rural roadsides throughout the municipality, and identified a number at the edge of Torquay that are assessed as medium to high value. These include Duffields Road, Grossmans Road, Coombes Road, Ghazeepore Road and Horseshoe Bend Road.

The '*Surf Coast Shire Roadside Management Strategy*' (2004) encourages new subdivision or development to take account of roadsides with high conservation value vegetation, and protect and enhance key habitat corridors.

Fire Threat

The threat of damage to life and property from wildfire in Torquay and Jan Juc is not as high as for other coastal townships that are encased by State Park or vegetated private land, however the town is vulnerable to fire from the north and west - a blaze in 1940 that commenced in Moriac destroyed much of the town. The Wildfire Management Overlay is applied to vegetated land at the edge of the towns.

Culture and Heritage

Aboriginal History

The land around Torquay and Jan Juc would have been well known, if not utilised, by aboriginal people for at least the last 30,000 years, with greatest use most likely to have occurred during the last 5,000 years. The 'Wada wurrung' is the Aboriginal language group that occupied the Torquay area at the time of European contact, with the language boundary extending from the Otway Ranges to the Werribee River, including the Bellarine Peninsula and Geelong. The introduction of stock by Europeans and encroachment of traditional hunting grounds and resources, together with spread of diseases led to a dramatic reduction in the numbers of Aboriginal inhabitants in the area. The Wathaurong Aboriginal Co-operative Limited is now the legislated custodian of cultural heritage for the 'Wada wurrung' language boundary area.

With the development of Torquay and Jan Juc as seaside holiday towns surrounded by land largely cleared for farming, there are few remaining undisturbed areas. Several archaeological reports have been undertaken in recent years as land has been rezoned for urban expansion of the towns, with approximately seventeen Aboriginal archaeological sites recorded within a three kilometre radius of Torquay. The aboriginal archaeological sites comprise shell deposits (middens), isolated artefact occurrences, surface scatters of stone artefacts and sub-surface cultural deposits. The majority of recorded sites are on the south side of Spring Creek in the area being developed as the 'Great Ocean Views' residential estate, but are minor in nature and have not prevented development from occurring. Negotiations with the Wathaurong Co-operative have resulted in agreements concerning treatment of the artefacts in these instances. Large scale residential or other development on broadhectare or large redevelopment sites will continue to be required to undertake archaeological surveys in acknowledgement of the pre-European habitation of this coastal area.

European History

The Torquay township (originally called Puebla and later Spring Creek) was slow to develop. Torquay was a popular seaside resort and camping location since the 1870s with many huts erected along the creek by holiday makers and fishermen, but was not developed as a permanent village until 1886 when town allotments were surveyed and sold.

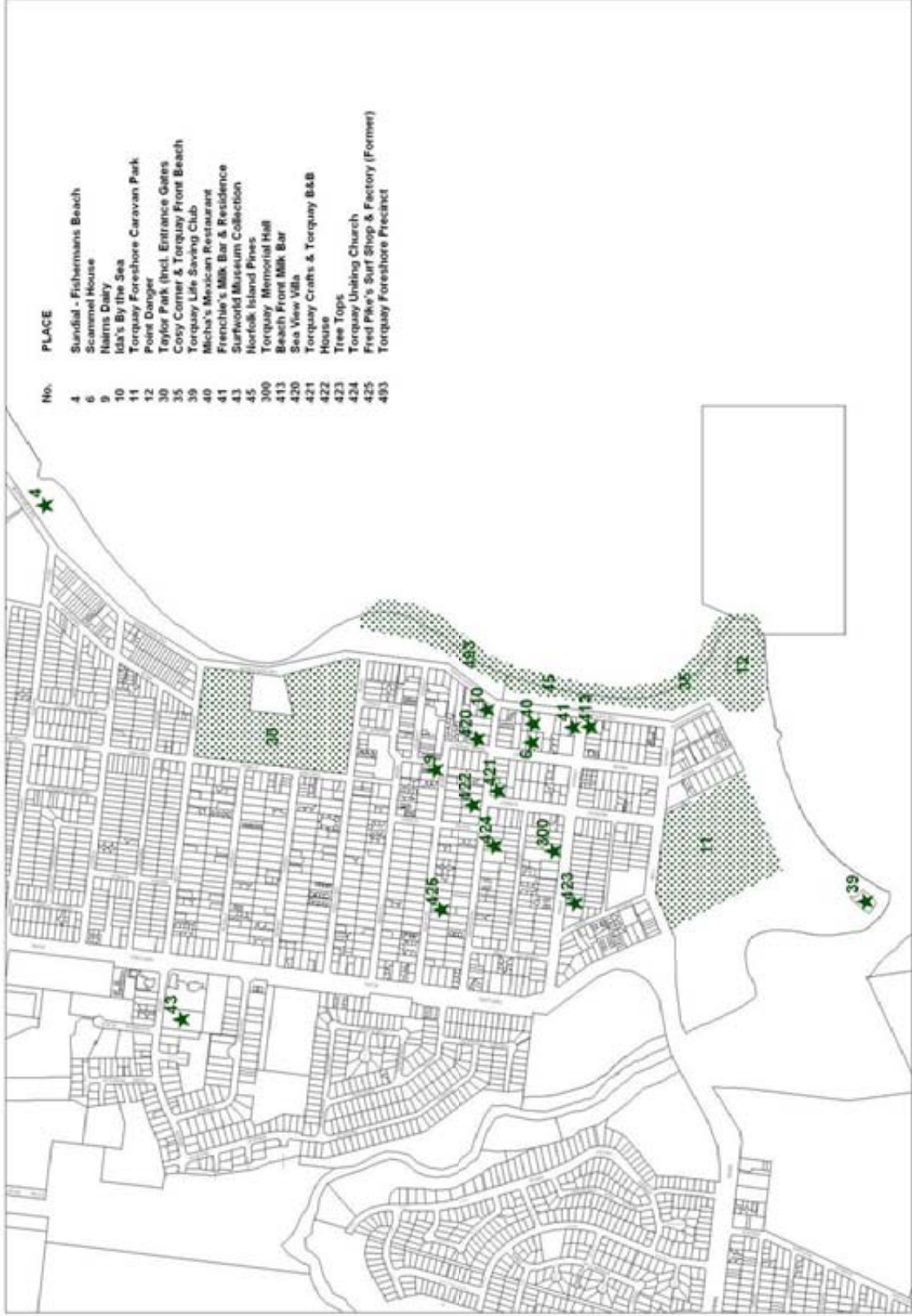
In recent decades, Torquay has been associated with the history of surfing, being home to the national headquarters of RipCurl and Quiksilver. Surfboard and surf clothing related manufacturing have formed the basis of the town's economy, and although manufacturing now occurs offshore, the retail of surf products contributes highly to the local economy. The attractiveness of Torquay as a permanent place of residence has increased since the 1990s, with substantial expansion to the north of Deep Creek and west of the Highway, redevelopment of older parts of Torquay, and infill housing at Jan Juc.

Heritage Features

The 'Surf Coast Shire Places of Cultural Significance Study – Report on Stage 1, Volume 2 – Inventory of places' (1998) lists a number of properties with potential local or high local heritage significance, particularly old beach houses and former shops within the 'Old Torquay' area. With one exception, none of these are protected under the Planning Scheme, and more detailed assessment is required to determine if application of a Heritage Overlay (HO) is warranted. Development pressures in 'Old Torquay' have potential to threaten the existence of these buildings. Plan 3.3 indicates the location of existing and possible heritage places nominated as part of the 1998 Study. Since their original nomination some places may no longer exist or may no longer be appropriate for assessment.

The Bells Beach foreshore reserve has recently had a heritage overlay applied to it under the planning scheme to protect its cultural heritage associated with surfing, and is listed on the Victorian Heritage Register. This listing strengthens the aim of limiting the visibility of development of surrounding lands from the Bells Beach Reserve to preserve its heritage values and the sense of cultural experience afforded by this stretch of coastline.

Map 3.3 Nominated Heritage Places, Torquay



Tourism

The natural environment and scenic qualities of the Surf Coast Shire, and the coastline in particular, underpins the tourism industry of the Shire and are a key focus for the promotion of Torquay / Jan Juc as both a tourist and lifestyle destination. Tourism benefits the community by injecting money into the local economy, providing jobs and creating opportunities for improved / additional facilities and infrastructure. It can also tax a community by impacting on lifestyle, overtaking services and infrastructure, and can lead to degradation of the natural environment through inappropriate or over-use.

The *Tourism Strategic Plan for the Surf Coast Region 2006* looks at establishing key strategies and actions for directing tourism in the Surf Coast region over the next 15 years, with the vision *"to provide the leading sustainable tourism experience in Australia"*. The Plan identifies a number of matters that are relevant to the review of the Torquay Jan Juc Strategy, documented as strengths, weaknesses, opportunities and threats. Of the strengths, relevant comments include:

- The surf industry, including the retail precinct, manufacturers, Bells Beach and the Surfworld museum, positioning Torquay as the birthplace of the global surf industry.
- The surf beaches and the reaffirmation that the beaches together with the surfing industry represent the image of the Surf – the icon of the Shire.
- The unique townships along the coast and in the hinterland that provides a range of experiences.
- The Great Ocean Road, as the major drawcard for visitation to the region, officially starts in Torquay.

The weaknesses that are raised include:

- Lack of activities for families compared to other beach destinations.
- Limited public transport available throughout the Surf Coast.

Some of the opportunities identified include:

- Heritage and arts tourism, including aboriginal culture could be further developed as tourism products.
- Conferencing as a developing niche product with venues such as The Sands and The Resort, Torquay.
- Indoor activities could be further developed such as cinemas, galleries, ten pin bowling, day spas and indoor recreational/entertainment venues.
- Township themes, developed on the natural evolution of each township and their communities, citing Torquay as the Surf Capital and the official start of the Great Ocean Road.
- Improvement of the Surf World museum through refurbishment or possible relocation to a more prominent position.
- Relocation of the Torquay visitor information centre to a more prominent position to make it more accessible to visitors.

Finally the Tourism Strategic Plan lists a number of threats which may provide some challenges for the Torquay Jan Juc Structure Plan and other relevant land use studies. These include:

- Large seasonal peaks in visitation create sustainability issues, both for local residents and the environment.
- Overdevelopment and inappropriate development which is not consistent with the environmental values of the Surf Coast, and could threaten the qualities that attract visitors.
- Development restrictions resulting from the introduction of the Farm Zone, restricting some levels of tourism activity / accommodation in rural areas.

In consideration of these issues as part of this land use review for the Torquay Jan Juc townships, the following tourism objective confirms a clear agreement in the community, whether considering tourism, land use planning or any other strategic influence, of the underlying values held in the Surf Coast Shire:

"Ensure that there is a balance between tourism and regional community lifestyle, through the promotion of the community's values of environmental sustainability, healthy lifestyle and community connectivity."

Servicing

Water

Reticulated water is supplied by Barwon Water from the Wurdee Buloc Reservoir to the new Torquay Tank in Grossmans Road. The site has room for a second storage tank if required in the future. The new tank has replaced the open air Torquay Storage Basin to the south of Grossmans Road, however Barwon Water has not made any decision about the future use of the former site.

The Torquay Tank directly supplies properties within Torquay and Jan Juc that are below the 30m contour. The Torquay High Level Pump Station, located adjacent to the Storage Basin, supplies water to properties generally between the 30m and 50m contours. This High Level Pump Station has been recently upgraded to service the growing areas to the north of Torquay. Refer to Plan 3.4.

A pipe through the Great Ocean Views Estate, across Spring Creek and north to Grossmans Road supplies water to existing and future development in that area, and connects with the Jan Juc High Level Pump Station on the Great Ocean Road between Torquay Boulevard and Duffields Road. The Jan Juc High Level Pump Station and the Jan Juc Storage Tank on the north side of the Great Ocean Road (north-west of Strathmore Drive), supply water to properties in Jan Juc between the 30m and 50m contours. A small booster pump supplies properties in Ocean Boulevard.

Barwon Water has purchased a site for a future tank in Ghazeepore Road, just south of Coombes Road. A tank and booster pumping system has been installed on part of the land to service the Ocean Acres rural residential estate north-west of Torquay and some surrounding land, which is above the 50m contour.

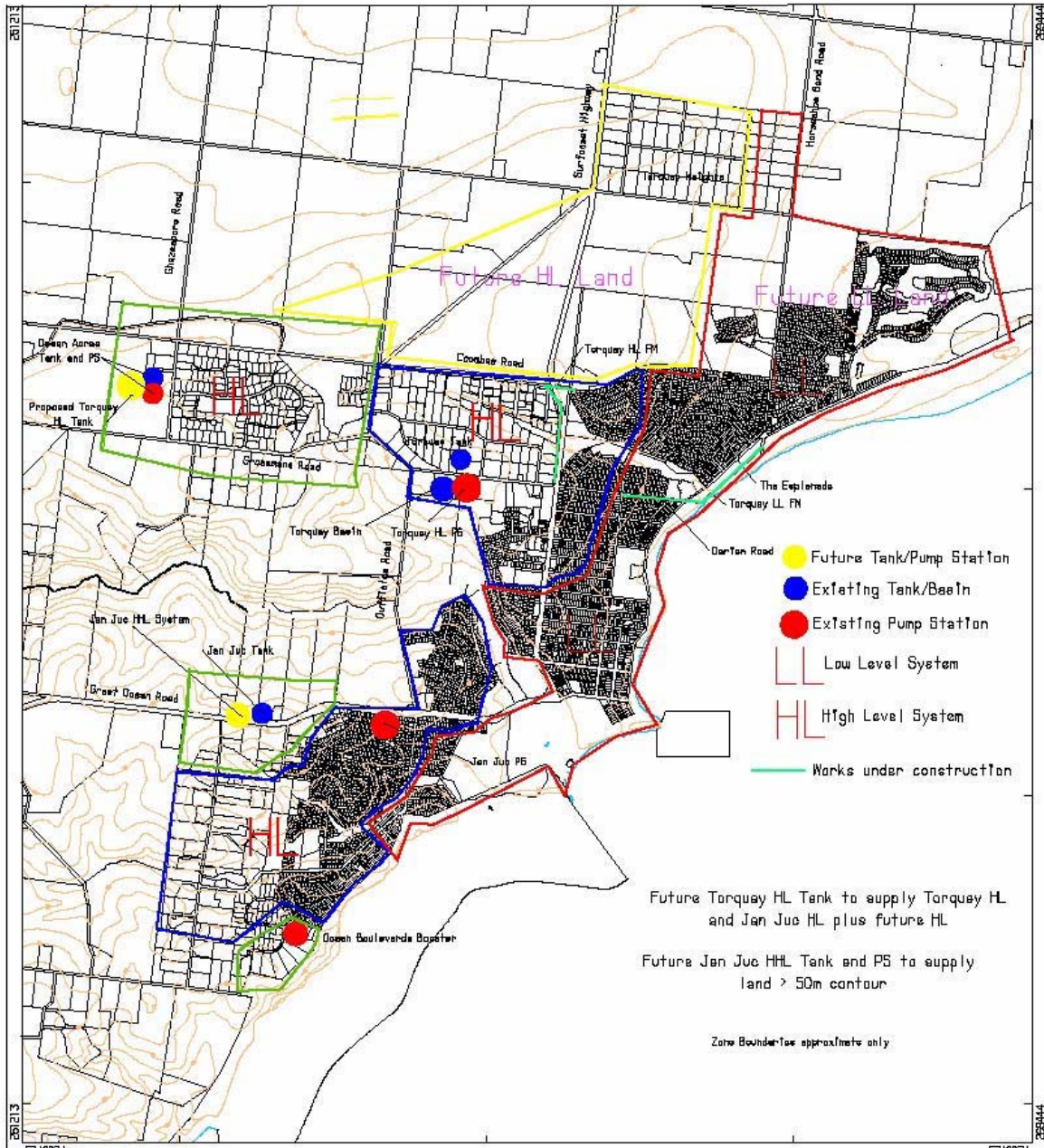
Barwon Water has prepared its strategy for water supply based upon the 1996 Comprehensive Strategy Plan, and therefore has not considered supply for any residential development west of Duffields Road between Grossmans Road and Great Ocean Road. This issue will require urgent attention as part of the development of a Growth Area Framework Plan for this corridor.

The following is a summary of supply proposals for areas proposed to be developed under the current Strategy:

- Development of the Torquay North industrial estate and land south of it in the Low Density Residential Zone will be supplied by a new feeder main along the Surf Coast Highway, extended from Grossmans Road.
- Residential development within the northern and western parts of the Torquay North residential corridor east of the Surf Coast Highway (between the 30m and 50m contours) will be supplied by an extension of the same feeder main. Long term water supply to the LDRZ at Torquay Heights (north of South Beach Road) will be available as development reaches South Beach Road. The alignment of this feeder main is not yet known.
- Residential development around Horseshoe Bend Road to the north and east below the 30m contour will be supplied by an extension of the low level system from the Torquay Tank.
- Residential development in the Torquay West corridor between the Highway and Duffields Road will be supplied by the existing pipe traversing that land.
- Barwon Water has future plans to construct a small tank and booster pump system to service land above the 50 m contour in Jan Juc.

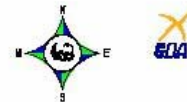
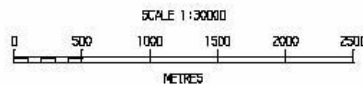
Barwon Water currently supplies Class C reuse water from the Black Rock Water reclamation facility to agricultural land north-west of Torquay. Barwon Water has previously expressed interest in an upgrade of Black Rock to enable supply of Grade A reuse water to new subdivisions in Torquay for reticulation to households for the watering of gardens and flushing of toilets, however concluded at the time that it was not yet economically or environmentally sustainable. In the meantime, it would promote the use of Class C water for watering of reserves, sporting ovals and the like. Council has expressed keen interest in implementing water reuse projects for its sporting reserves and is working with Barwon Water to this end.

Plan 3.4: Torquay Jan Juc Water Supply System



GK May 06

TORQUAY WATER SUPPLY SYSTEM



INDICATES THE PRESENCE OF SEWER HAZARD (BENZENE) FOLLOW OH & S GUIDELINES

MAP GRID of AUSTRALIA ZONE 55
LEVELS ARE TO AUSTRALIAN HEIGHT DATUM
GRID SHOWN AT 2500 METRE INTERVALS
Copyright: Berwon Water, 2006

At the same time, the development of a third pipe system for new residential estates needs to be persevered with, and in this regard a private consortium has expressed interest in developing a water reuse project in the Torquay area. The consortium is investigating the provision of treated water to the proposed new industrial estate, expanded commercial/intensive agricultural use in the vicinity of Messmate Road, and opportunities presented by the low density residential estates. All options should be further pursued with Barwon Water.

Sewerage

Land within areas zoned R1Z are serviced by a reticulated sewer. Sewerage is pumped by Barwon Water to the Black Rock water reclamation plant east of Breamlea. The majority of Low density residential lots in the LDRZ north of Torquay and west of Jan Juc are not connected to the reticulated system and are serviced by individual septic systems, however, approximately 50 low density lots in the south-west part of Jan Juc are connected to the sewerage reticulation system.

As with water, Barwon Water's '*Torquay Sewerage Strategy*' has been developed to cater for strategies flagged in the 1996 Comprehensive Strategy Plan, including increased density of development in central Torquay, and does not provide capacity for any development west of Duffields Road in Torquay West - a new reticulated system would be required to service that area.

Proposals by Barwon Water to service new development envisaged by this Strategy include:

- An upgrade of the sewerage system in The Esplanade and Darian Road to service development in the northern parts of Torquay, including:
 - A new pumping station including underground emergency storage in the foreshore opposite Horseshoe Bend Road and an upgrade to an existing pump station south of Darian Road.
 - A new gravity sewer along Darian Road to connect with a proposed pressure main running north along Surf Coast Highway to Deep Creek and a gravity sewer between the creek and Coombes Road. A pump station will be required at Deep Creek. These assets will service the new industrial estate and low density residential zone north of Coombes Road, and land in the LDRZ between Coombes Road and Grossmans Road. This system will also have capacity to cater for the increased densities south of Deep Creek, resulting from the lands proposed rezoning to R1Z. They will also service the south-west corner of land east of the Highway, which is on the southern side of the ridge.
 - A gravity sewer along Horseshoe Bend Road to service the balance of land in Torquay North east of the Highway, with a pump station and pressure main on the east side of Horseshoe Bend Road, north of existing subdivision.
- A new pump station adjacent to the north side of Spring Creek to service new development in the Torquay West corridor east of Duffields Road. A new pressure main to Beach Road is proposed, connecting with a gravity sewer that continues to Surf Coast Highway.
- Replacement of the transfer main which transfers the total of Torquay and Jan Juc sewage to the Black Rock water reclamation plant. This will accommodate the proposed developments listed above and previously outlined in the 1996 Comprehensive Strategy Plan, including infill development.

Other issues raised by Barwon Water include:

- Current Barwon Water strategies are capable of accommodating higher densities of residential development along the east side of the Highway in Torquay North on land previously flagged as being future rural residential. (Land bordered by Torquay Highway, South Beach Road, Wombah Park and Horseshoe Bend Road.)
- A preference that land in the LDRZ north of Coombes Road, between Coombes Road and Deep Creek, and at 'Ocean Acres' north-west of Torquay be sewered as adjacent areas are supplied by a reticulated system. The Sewerage Strategy assumes connection of these areas.
- There is no proposal to provide a reticulated sewerage system to the LDRZ at Bells Boulevard or Torquay Heights (north of South Beach Road).

Sequencing of development in the residential and industrial corridors should occur as follows:

- In Torquay West, land along the north side of Spring Creek at the south-eastern corner should be developed first, with development progressively stretching upwards to the north-west corner of Duffields Road and Grossmans Road.
- In Torquay North, land adjacent to existing developed areas, either side of Horseshoe Bend Road, should develop prior to land further to the north-west, ie. development should occur from east to west towards the Highway and South Beach Road intersection. Land at the south-west corner and land west of the Highway could be developed at any time provided the pump station and sewer along Surf Coast Highway are constructed.

With the recent investment of capital into the upgrade of the Torquay Jan Juc sewerage system, Barwon Water would not favour the early development of land west of Duffields Road, which will require a new separate sewerage system.

Stormwater Drainage

The management of the stormwater drainage system is the responsibility of the Surf Coast Shire Council. The topography of Torquay and Jan Juc for the most part lends itself to few stormwater problems such as flooding, however stormwater discharge can significantly impact on the foreshore, and the water quality of the ocean, estuaries and their environs.

The majority of old Torquay and Jan Juc is serviced through the traditional underground street drains which feed into natural drains and discharge to the sea. Some retrofitting of gross pollutant traps have occurred in these systems, however issues of treatment and retention still require attention. More recent subdivisions have incorporated water retention and treatment facilities. These are for the most part in the form of natural filtration ponds. The Sands residential golf course development provided the opportunity to redesign the stormwater holding lagoons fed from the Torquay North (Wombah Park etc) area into treatment ponds, with The Sands then storing and reusing the treated stormwater for use on the golf course. The Sands development will continue to play an important role in the use of stormwater for much of the balance of the Torquay North growth area.

In a similar vein, residential development in the Ocean Views estate incorporates stormwater treatment ponds adjacent Spring Creek.

Council's Urban Stormwater Management Plan, 2002 adopts water sensitive urban design as a principle for the design of stormwater systems in new residential subdivision and guides Council requirements for stormwater treatment.

Site Specific Considerations

Infill Development

The opportunity for infill development is influenced by a number of factors, including preferred neighbourhood character outcomes, servicing capacity, environmental constraints etc. In addition to infill development through multi-dwelling developments, particularly in old Torquay, a number of sites in Jan Juc and Torquay have some potential for an increased level of development density that would necessitate a rezoning from Low Density Residential to Residential 1 or a policy change to the preferred minimum lot size.

Briody Drive Estate

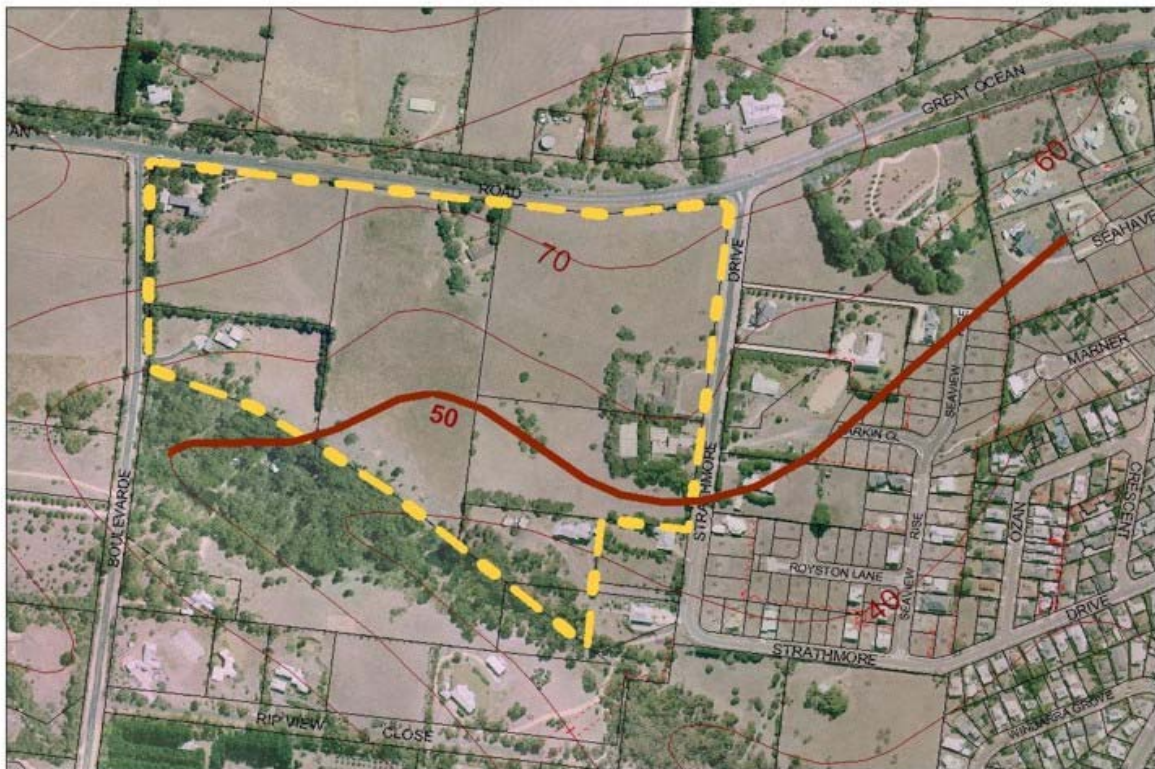
The Briody Drive Estate was identified in the Torquay Jan Juc Strategy of the MSS as having good potential for redevelopment at a higher density having regard to its proximity to newly developing community facilities and availability of servicing infrastructure. Part of this estate has now been rezoned to Residential 1 with the support of the majority of the affected land owners. The eventual rezoning of the balance of the estate is to continue to be encouraged and should be based on an Outline Development Plan and Development Contribution Plan for the estate to facilitate its coordinated redevelopment when there is sufficient land owner support.

Strathmore Drive

Land owners have expressed an interest in increasing the development density of land on the west side of Strathmore Drive. This land is currently zoned Low Density Residential with a 1.5ha preferred minimum lot size. The portion of the east side of Strathmore Drive that is similarly zoned LDRZ has a 0.4ha preferred minimum. The southern boundary of this zone east of Strathmore Drive generally follows the 50 metre height contour, above which only a limited, low pressure water supply is available. The recent approval of a private street scheme to seal Strathmore Drive though to the Ocean Road has given added impetus to land owners on the west side to be allowed to develop at a higher density to offset the cost of the street scheme. The Special Charge Scheme prepared to finance the construction of Strathmore Drive was taken to VCAT for review and this review was based on the existing Low Density Residential Zoning of the land.

The area that could be subject to review comprises five lots bordered by Strathmore Drive, Great Ocean Road, Bells Boulevard and the upper tributary of the Jan Juc Creek. This totals about 13.7 hectares and each lot contains an existing dwelling. A reduction of the lot size from 1.5ha to 0.4ha could realise up to 20 low density residential lots, allowing for existing development, internal road network and creek reserve.

Plan 3.5: Strathmore Drive Low Density Residential Area



The main issues that will influence any decision include:

- Barwon Water's ability to provide an adequate service.
Barwon Water is currently planning an upgrade of the Jan Juc water service (termed the high high level) to enable it to supply a reticulated water supply to land above the 50 metre contour. The HHL system could be designed to accommodate future development of the land west of Strathmore Drive. Of greater limitation is the capacity of the existing Jan Juc sewerage system. While a sewerage service may be able to be provided for a limited development, it is Barwon Water's preference for any development density increase in the Jan Juc Low Density Residential

Zoned area to be capable of containing and treating its waste water on site in the event that the sewerage system cannot accommodate the development.

- Visual impact of additional development, both along the Great Ocean Road and of views to the ocean from the Great Ocean Road.
The subject land is generally cleared grazing land of moderate slope with views to the ocean over Jan Juc. Views to the ocean across the site are possible along sections of the abutting Great Ocean Road, though protection of these views is not considered paramount and with any development of the land are likely to be reduced over time with screen planting.
- Co-ordinating access onto and within the site to avoid a new access road directly off the Great Ocean Road.
Vic Roads would not support an additional road access directly off the Great Ocean Road. In this regard, it would be necessary to prepare an outline development plan for the site to ensure that any development of the land is coordinated and provides a road network and lot design that avoids an additional access onto the Great Ocean Road.
- Protection of the vegetated drainage line forming an upper tributary to the Jan Juc Creek.
The site generally slopes to the south-west to an upper tributary of the Jan Juc Creek. This gully is fairly well vegetated and the creek itself is some 20 to 60 metres from the southern property boundary of the subject land. Any development of the land should provide and maintain a minimum 30 metre vegetated buffer to the creek and drainage from the land should be treated prior to discharge to the creek.
- Protection of the vegetation on the site.
The vegetation assessment undertaken by Mark Trengrove for the Torquay Jan Juc area, as discussed earlier in this chapter, identifies this area as predominantly containing exotics and/or non-indigenous natives. It does not allocate any flora values to the site, though a more detailed assessment would need to be undertaken to confirm the absence of any significant vegetation.

Having consideration to the above overview of issues there appears merit in supporting a density increase to 0.4ha in this area. This area, by virtue of its former grazing use, is distinctly different to the predominantly remnant native bush environment that characterises the Low Density Residential Zoned area south of the Jan Juc Creek tributary and along Bells Boulevard.

Support for a policy change north of the tributary should be subject to the application of a Development Plan Overlay that would require a more detailed analysis of the physical conditions of the site and surrounding land, and the preparation and approval of a Development Plan prior to the consideration of a planning application for subdivision. The Development Plan Overlay should specify any specific requirements a Development Plan should meet, generally as discussed above.

This policy change is somewhat dependent on uniform support of all land owners to facilitate the preparation of a Development Plan for the whole site. The policy change could be applied to a reduced area if support from some land owners is not gained. This may rule out a future density increase for any such land if the subsequent approved Development Plan does not make provision for the excluded land to be able to meet the requirements of the DPO.

Bells Boulevard East

In a similar vein to the above, there has been recent interest expressed by some land owners south of the Jan Juc Creek tributary and east of Bells Boulevard to support an increase in subdivision density on their properties. However, as noted in the previous discussion on land west of Strathmore Drive, the area south of the tributary is intermittently or randomly vegetated, which includes stands of Bellarine Yellowgum Woodland that is rated as being of State significance. While some properties are relatively un-vegetated, their locality and interrelationship with surrounding vegetated properties does not provide a basis for the simple application of an increase in density. Other considerations to such a policy shift would also need to include an assessment of servicing and visual landscape implications.

At face value, the vegetated Jan Juc creek tributary provides a natural boundary to distinguish a change in development density. Hence, from a strategic perspective, the creek tributary provides a

fairly logical density boundary, providing a clear delineation between the two areas. However, this is only a cursory assessment, and a more detailed investigation may be warranted.

Were this area south of the tributary to be considered, a wider and more comprehensive study would be necessary to take into account adjoining properties and overall environmental and demand/supply issues. Plan 3.6 outlines in hatching the minimum extent of area that should be included in any review. Any such study would need to be initiated and financed by all or some of the affected land owners as this is not a strategic priority of Council.

Plan 3.6: Bells Boulevard East Low Density Residential Area

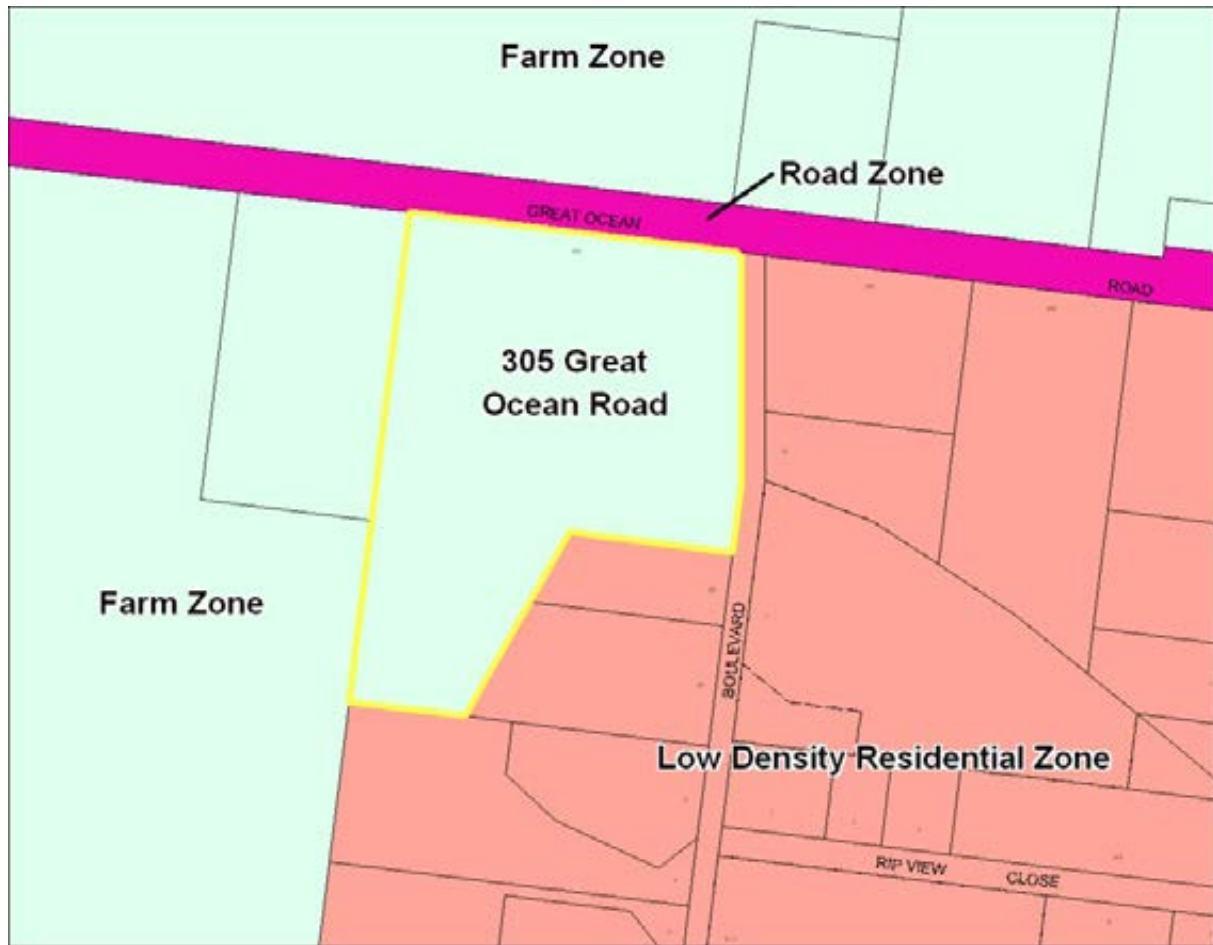


305 Great Ocean Road

The owner of 305 Great Ocean Road has expressed an interest in zoning his site for low density residential development. The subject land is 10.3 hectares in area comprising cleared grazing land. The site slopes from a high point in the north-west into a valley at its south-east. It contains a single dwelling and outbuildings and has distant views to the ocean. The land is clearly visible from the Great Ocean Road and from Bells Boulevard.

The subject land is zoned Farming and is presently outside the town settlement boundary. Part of the original title (south-east corner) was excised from the site in 1992 (Permit 92/4808) following the earlier (late '80s early '90s) rezoning of the south-east corner from Rural General Farming to Rural Residential (Amendment R80 to the Geelong Regional Planning Scheme) by the Geelong Regional Commission.

Plan 3.7: Zoning of 305 Great Ocean Road



The logic or reason for the exclusion of the balance 10.3ha (305 Great Ocean Rd) from the 'rural-residential' zone is not apparent and the history records for the rezoning are unavailable. Zoning to the east has been influenced by the limitation of providing a reticulated water supply above the 50m contour, however this does not explain the zone boundary of 305 Great Ocean Road. The protection of the view of the western approach to Bells Boulevard may have been a factor, but would appear to be a fairly tenuous one in that the Great Ocean Rd and Bells Boulevard intersection is not a particularly significant or memorable entry or landscape vista (refer Plan 3.6 for aerial photo of site)

The main issues that will influence any decision to rezone the site and extend the settlement boundary are generally established in Ministerial Statement No. 6 and include:

- **Urban Area Integration**
The site is on the edge of the town boundary and is not identified for future residential use at normal densities. Inclusion of the site would square off the settlement boundary in a logical manner.
- **Supply and Demand**
The small area of land involved would have negligible impact on demand or supply of low density residential lots.
- **Servicing Authorities**
A reticulate water supply would presumably be available following the upgrade of the Jan Juc water service. Reticulated sewerage should not be necessary with a minimum lot size of 1.5ha.

The main issues that will influence any decision include:

- Level of support of affected land owners.
Other land owners have not been formally surveyed by Council, though it is understood that there has been some level of support. This would need to be followed up if the proposal meets the other criteria and is considered worth pursuing.
- Existing availability of both reticulated water and sewerage.
An increase in development density could be accommodated by the existing water and sewerage infrastructure services and hence is not an impediment. Notwithstanding, the Jan Juc sewerage system has only a limited remaining capacity and the implications of the level of increase in development would need to be assessed and considered for the whole Jan Juc area.
- Protection of the vegetation on the site.
The vegetation assessment undertaken by Mark Trengrove for the Torquay Jan Juc area, as discussed earlier in this chapter, identifies this area as being a Bellarine Yellow Gum Woodland. The subject area is identified as Jan Juc Central No. 18 on the Vegetation Map. The description, distribution and significance of this woodland is described as follows:

Bellarine Yellow Gum Woodland

Community Description

Open woodland dominated by Bellarine Yellow Gum with scattered occurrences of other Gums, such as Manna Gum (*Eucalyptus viminalis*) and Ironbark, Moonah and Drooping Sheoke (*Allocasuarina verticillata*). The understorey is mostly open and dominated by a range of shrubs with some grasses, sedges and herbaceous species. Was probably more widespread prior to European arrival.

EVC

This community is described as EVC 175 Grassy Woodland (RFA 2000).

Distribution

The most intact examples of this community are the Jan Juc populations to the west of Domain Road, south of Strathmore Drive and east of Bells Boulevard. Relatively intact examples occur at Spring Creek, Deep Creek and a relative large population occurs at Duffields Road. The less intact Torquay populations are located in central Torquay.

Significance

This vegetation has very limited distribution in Victoria where it is found on the Bellarine Peninsula and in the Torquay/Jan Juc area. The Bellarine Yellow Gum is listed as protected species on the Victorian Flora and Fauna Guarantee Act (1988). A previous study (Trengrove 2001) estimated that there were approximately 4,800 trees extant within the Surf Coast Shire populations.

The Jan Juc populations are Jan Juc Central (#18), South of Strathmore Drive (#13), Duffields Road (#21) and Toadhall Lane (#15). Sites 13 and 15 include some areas of relatively intact understorey while sites 13 and 21 consist of relatively large populations. All these site are of State Conservation Significance and are rated 5.

Unit Descriptions

Jan Juc Central (#18)

Mosaic of stands and individual trees of Bellarine Yellow Gum and Manna Gum with areas of non-indigenous natives and exotics. Understorey mostly modified, with some remnant understorey in Sunset Strip and Ocean Boulevard. Includes mature and juvenile Bellarine Yellow Gums.

As noted in the above extract, the subject area contains Bellarine Yellow Gum Woodland which is considered to be of State significance. The report goes on to recommend retention of all remnant

trees within this woodland and to ensure activities do not endanger the retention and health of the Yellow Gum species.

All of the seven lots within this area are relatively well vegetated. This site is more particularly documented in terms of the number, condition and associated species in a report prepared by Mark Trengrove in 2001, titled Bellarine Yellow Gums in the Surf Coast Shire. It is clear that any subdivision of these sites, whether into two or more lots each, no matter how well planned, will impact to some degree on retention of the existing stand of vegetation.

- Maintaining a reasonable supply of low density residential lots in the Torquay / Jan Juc area.
The subject area comprises seven lots in a pocket of 50 low density residential lots (with an average lot size of 0.4ha). This low density residential area, together with an area of land around Strathmore Drive which has the current zoning opportunity for approximately 18 lots, are the only areas providing lots of this size in Jan Juc. West of the subject area, extending along Bells Boulevard, larger low density residential lots (average 1.5ha) provide an effective south-west urban boundary to Jan Juc. The combined number of low density residential lots represents a mere 4.5% of the total potential yield of residential lots in the Jan Juc area.

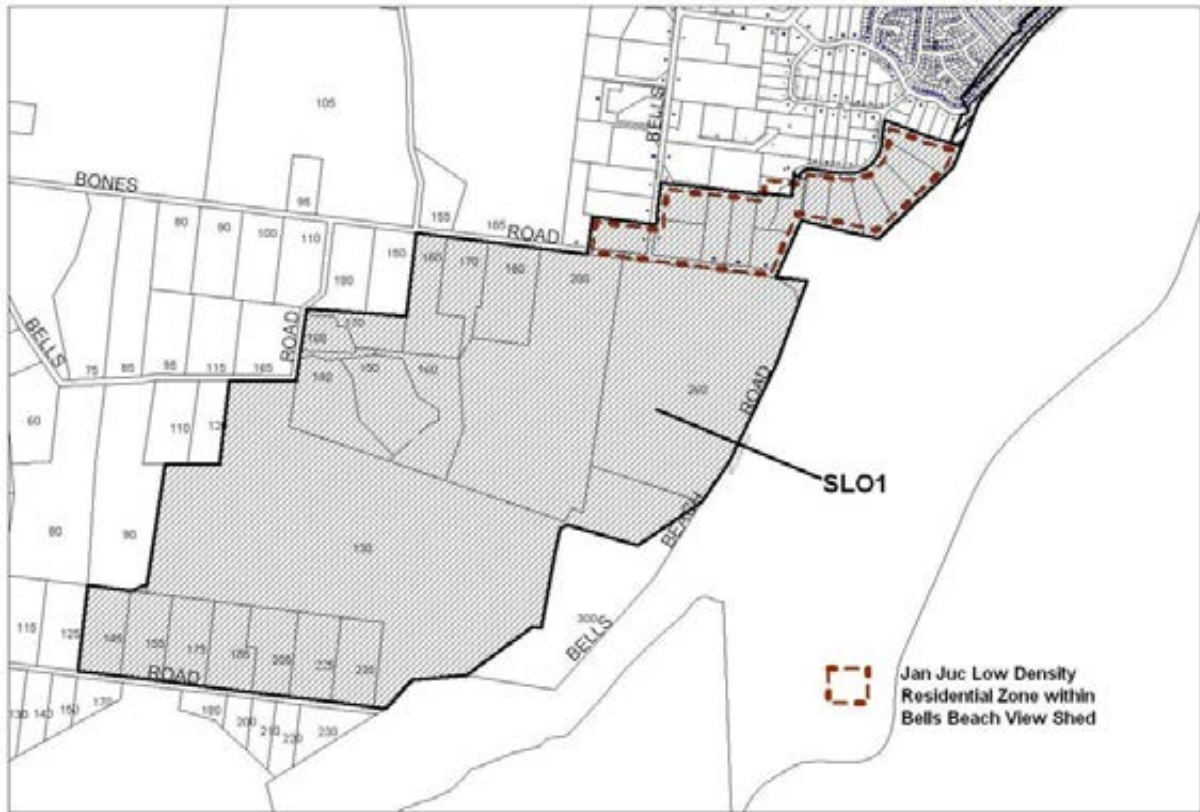
There is no accepted standard in terms of the percentage of lots that should be provided as low density residential, and indeed there is no requirement to provide any at all. Nevertheless there exists a market for such lots and the existing provision of 0.4ha lots in the Jan Juc area is already minimal (1.8%) and comprises land that is generally well vegetated with important flora values.

Having consideration to the vegetation type found within the site, there is little merit in pursuing a higher density of development on any of the lots within this triangle of land. The sites, in their vegetated state, are more suited to continuing to meet the demand for a low density residential lifestyle in a bush environment, and this density of development will better serve to protect this remaining significant vegetation. In this instance, the loss of vegetation that would occur as a result of any increase in development opportunity is not offset by any community benefit that might arise from further development. Accordingly, a rezoning of any of this land sited between Sunset Strip and Ocean Boulevard is not supported.

Bells Beach Viewshed

The protection of the vista from the Bells Beach Surfing Recreation Reserve is an important element in preserving the cultural heritage experience of visiting this iconic reserve. In retrospect it is unfortunate that the low density development of Jan Juc was allowed to infiltrate over the southern ridge, visually exposing development of this part of Jan Juc to Bells Beach and this stretch of coastal reserve. While the bulk of this exposed low density residential area is already developed, it is nevertheless important to continue to acknowledge this area as a prominent landscape requiring control to limit further visual exposure of development. This area is shown on Plan 3.9 and comprises 14 lots generally of average size around 2.0ha. The 1.5hectare minimum lot size for this area should be reinforced as a schedule to the Low Density Residential Zone. In addition the Significant Landscape Overlay – Schedule 1 (which applies to the viewshed) should continue to apply, with a review of this overlay (in conjunction with the Rural Land Use Strategy Review) to ensure its relevance and effectiveness.

Plan 3.9: Bells Beach Surfing Recreation Reserve Landscape View Shed





4 Projected Growth and Infrastructure Needs Assessment

Study Area and Precincts

The Structure Plan study area is based on a minimum 20 year outlook. From a residential development perspective, the Torquay Jan Juc Strategy in the Municipal Strategic Statement of the Surf Coast Planning Scheme identified future residential areas in Torquay North, with long term urban growth opportunities north to South Beach Road; and in Torquay Central, with long term urban growth opportunities west of Duffields Road along the Spring Creek valley. Annual land demand and supply analysis undertaken by the Shire⁵ indicates that all this area described will be required in some form to meet growth demands over the next 20 years.

Detailed Outline Development Planning has previously been undertaken for the whole Torquay North growth area (to South Beach Road), and for the Torquay Central future residential area (to Duffields Road). This Structure Plan further refines these ODP's to respond to the sustainable development principles established earlier in this report and the provision of community infrastructure identified later in this report.

No such development framework analysis has been undertaken for land west of Duffields Road within the Spring Creek valley. The analysis and planning required for this growth corridor was beyond the scope of this Structure Plan. Nevertheless, the inclusion of the first kilometre (approximately) of this growth corridor in the needs analysis of community infrastructure is important both in terms of the limited capacity of the area to accommodate active public open space and the potential increased range of facilities that can be justified for the whole township of Torquay and Jan Juc. It is acknowledged that the lack of a framework plan / outline development plan for the growth corridor places limitations on the inclusion of this area in a Development Contribution Plan, particularly concerning the analysis of traffic infrastructure requirements etc. Nevertheless, a reasonable estimate of future population capacity can be made at this stage and a revision to the DCP can follow the detailed planning of this area.

In this regard, the preparation of a framework plan for the Spring Creek Valley growth area should commence as soon as practical. The Spring Creek Valley is quite a unique and highly aesthetic landscape and presents an outstanding opportunity for a creative and adaptive approach to development of this valley. It is paramount that the preparation of the framework plan be undertaken in a highly inclusive manner to reflect the ideals of the local community. The framework plan should, among other things, address the long term western settlement boundary of Torquay and the inter-relationship of the growth corridor with the Bellbrae township.

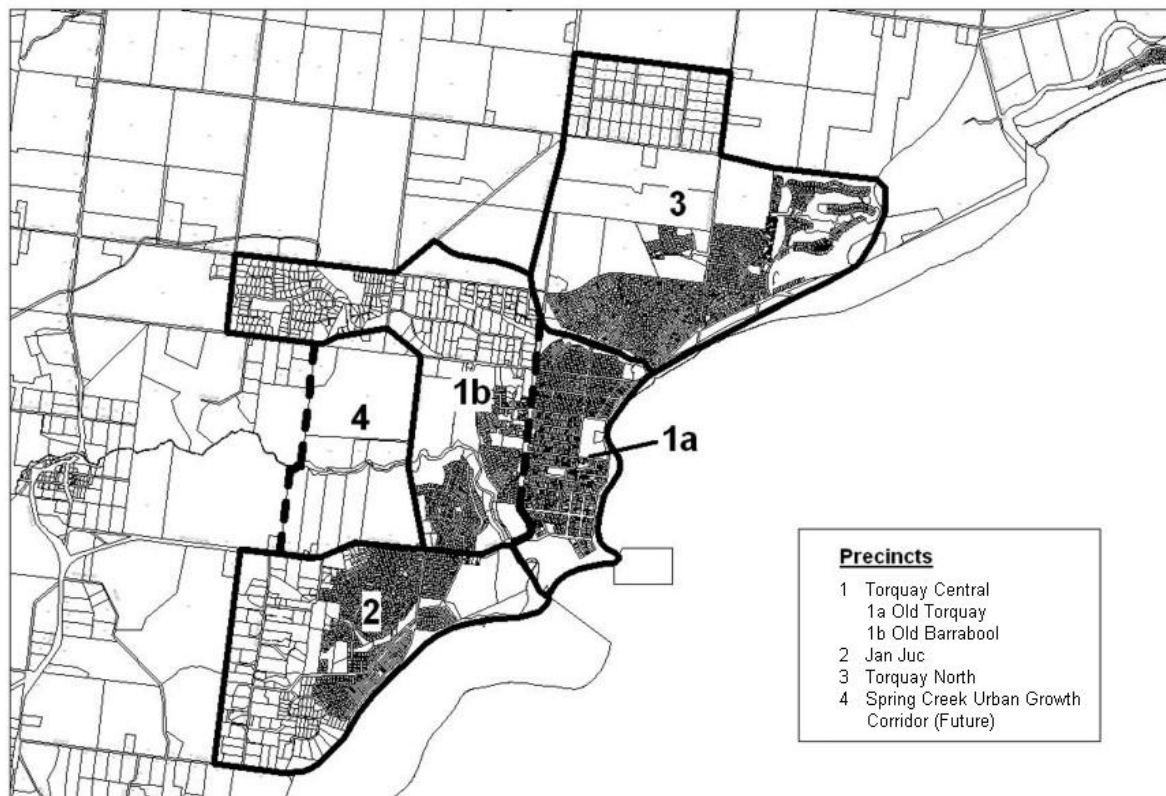
The study area can be divided into four broad precincts, generally representing neighbourhood catchments across the existing and future development areas of Torquay and Jan Juc. These comprise:

⁵ Torquay Jan Juc Residential Land Supply Analysis 2005 and Addendum 2006, Surf Coast Shire.

- **Precinct 1** – Torquay Central, consisting of the older area of Torquay east of the Surf Coast Highway and the area of Torquay west of the Highway that was formally in the Barrabool Shire, including the Ocean Views Estate, the Church Estate, the Surf Coast Plaza and the newer low density residential estates along Grossmans Road.
- **Precinct 2** – Jan Juc, comprising the whole area of Jan Juc which includes standard density and low density residential estates.
- **Precinct 3** – Torquay North, consisting of development north of Deep Creek including Wombah Park, South Beach Estate, The Sands, future growth areas and the Torquay Heights low density residential estate.
- **Precinct 4** – Spring Creek Urban Growth Corridor, providing for future urban growth within the Spring Creek valley west of Duffields Road, initially for a distance of approximately 1 kilometre.

These Precincts are depicted in Plan 4.1. The 2001 Census data can be readily applied to some of these Precincts and can be broken down to smaller areas through the Collector Districts; however it is not likely that smaller precincts will be necessary for preparation of a Development Contribution Plan other than distinguishing between the two sub areas of Torquay Central.

Plan 4.1: Planning Precincts



Population Projections and Profile

Population Growth

The population of Torquay and Jan Juc (and surrounding hinterland) in 2001 was 10,485, having increased at a rate of approximately 4.5%pa since 1996. This growth contributed significantly to the population of the municipality as a whole, which increased from 16,674 to 19,629 (+4%pa) within that period, and continues the growth experienced in previous census periods. It also places Torquay and Jan Juc as one of the highest growth areas outside metropolitan Melbourne.

The recent growth has exceeded forecasts in the 1996 'Comprehensive Strategy Plan for Torquay and Jan Juc', with strong impetus from the so called 'sea change' movement. Most of the population growth in recent years has occurred at the periphery of Torquay north of Deep Creek, south of Spring Creek, and to the north-west of Jan Juc, with substantial in-fill development within older parts of Torquay and to a lesser degree, Jan Juc. The population of Torquay and Jan Juc is forecast to continue its relatively high rate of growth estimated by ID Consulting P/L (to 2021) on behalf of the Shire and shown in Table 4.1 below.

Table 4.1: Forecast Population Growth for Torquay and Jan Juc 2001-2021

2001	2006	2011	2016	2021
10,485	12,486	15,753	18,682	21,409

Source: ID Consulting P/L 2006

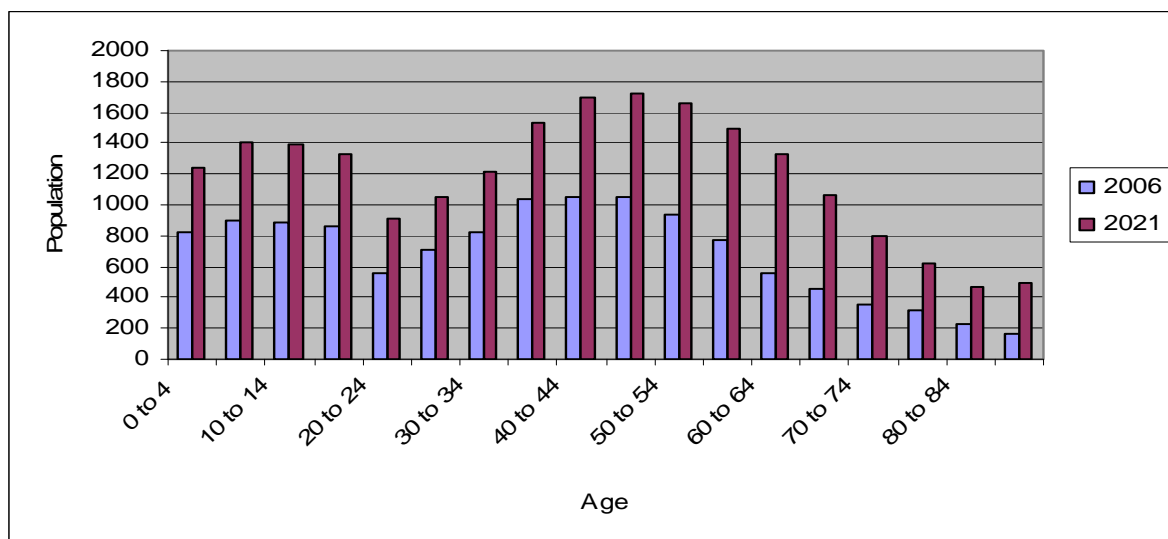
The ID forecasts are based on precincts that include some of the hinterland areas of Torquay and Jan Juc. The Torquay and Jan Juc Residential Land Supply Analysis 2005 calculates the proportion of this population attributable to the urban and rural components of the ID precincts based on a population estimate for Torquay Jan Juc in mid 2003 at about 9,080. This proportion of the total population is extrapolated in the following table.

Table 4.2 Forecast Population Growth, Rural and Urban Components 2001-2021

Summary data	Forecast year				
	2001	2006	2011	2016	2021
Total population	10,485	12,486	15,753	18,682	21,409
Rural component		2,530	2,680	2,830	2,980
Urban component (Tor / Jan Juc)		9,956	13,073	15,852	18,429

The forecasts identify large gains in Torquay of both younger and older families in the 0-18 and 25-54 age groups up to 2011, with less growth in the 20-34 and 65+ age groups. In contrast, forecasts relating to Jan Juc for the same period identify a drop in the number of young families (ie population aged 0-9 and 25-39) and growth in the number of persons aged in excess of 45 years. The anticipated aging of Jan Juc's population is attributed to the reduced opportunities for development of broad acre subdivision within Jan Juc south of Great Ocean Road, whilst Torquay will continue to attract young families to its establishing broadhectare areas. Refer to Figure 4.1 below.

Figure 4.1: Forecast Age - Sex Profile – Torquay and Jan Juc 2006-2021



Source: ID Consulting P/L 2006

Changing Role of the Towns

Torquay and Jan Juc have historically developed as coastal holiday destinations, with low numbers of permanent residents – 42% of houses were unoccupied in 1986 (ABS census). This has changed substantially over the past few decades however as Torquay and Jan Juc have become more attractive as a permanent place of residence, particularly since completion of the dual lane carriageway between Torquay and Geelong in the late 1980s which made it easier for residents to commute to Melbourne and Geelong for work. By 2001, the proportion of unoccupied dwellings had reduced to 27%, and this downward trend is expected to continue, and is forecast to drop to 15-20% by 2021 (ID Consulting P/L).

Future Growth in Dwellings

The 'Torquay Jan Juc Residential Land Supply Analysis' (Nov 2006) examined rates of building approvals over the past decade, with an average of 242 approvals in Torquay and Jan Juc over the five years between 2001 and 2005 (inclusive). There has been a fairly consistent growth in building approvals over this period (from 180 to 320 approvals). Approximately 22% of the building approvals in 2002 and 2003 were attributable to medium density development in central Torquay (ie replacement of single dwellings with multi-dwellings). This reduced to 9% for 2005. Torquay North substantially increased its share of all residential building approvals in 2004 & 2005 to 70%, reflective of the diminishing availability of land in Torquay Central and Jan Juc.

It is anticipated that with pending construction of the Geelong Ring Road, establishment of a new industrial estate north-west of Torquay and continued attraction of coastal living, this rate of building approvals will be maintained for the foreseeable future.

Allocation of Population Growth to Precincts

Based on existing development, population projections, servicing capacity, past development densities, existing outline development plans and target residential densities, projected residential lot yield and population capacities have been calculated for Torquay / Jan Juc, split into the four planning precincts that comprise the structure plan area as shown on Plan 4.1. Projected lot yield and population capacity is shown in Table 4.3.

Table 4.3 Projected Residential Lot Yield and Populations for Torquay and Jan Juc at Time of Full Development of Study Area

Precinct	Estimated Capacity		
	Residential Lots	Approx. Population	Approx. Additional Population
1 - Torquay Central	5,100	9,795	
2 - Jan Juc	2,007	3,854	
3 - Torquay North	5,645	10,841	
4 – Spring Creek UGC	2,880	5,386	
Total	15,632	29,876	19,920

Source: Appendix 2

The above estimated lot and population capacity for the town comprises a combination of existing developed areas, with some capacity for infill, developing estates and vacant broadhectare land. Appendix 2 provides a breakdown of these areas in smaller precincts with qualification of the assumptions made for each sub-precinct to arrive at a capacity population. Over half of the additional estimated population within the Torquay Central precinct is based on infill development and

redevelopment of a low density residential estate, hence the estimate is less reliable than can be made for broadhectare subdivision and may prove to be on the high side. The figures in Table 4.3 have formed the basis for developing the Torquay Jan Juc Structure Plan.

It is noted that the estimated population capacity of 23,800 for Precincts 1 to 3 (Torquay Central, Jan Juc and Torquay North) is well in excess of the projected 2001 population of 18,500. Nevertheless, this area alone will not provide a continuing 10 year supply of residential zoned land or 15 year supply of future residential land as sought by the State Government's Urban Development Program. Without a new growth area, the availability of land in these precincts will quickly shrink, forcing up land prices.

At present, current residential zoned land supply is only around 4 years. A rezoning is about to commence for the balance of the land area in the Torquay Central Precinct and this will need to be followed up with the rezoning of additional land in Torquay North. Having consideration to the demand and supply analysis, and the current and projected development rate, it is a given that development of the Spring Creek Urban Growth Corridor west of Duffields Road (Precinct 4) will likely need to commence in the medium term, particularly if Council wishes to maintain two growth fronts.

Being only a relatively small town, it may be considered unrealistic to achieve a continuing 10+ years supply of broadhectare land as per the Urban Development Program. This target may be more realistically applied at a Regional level, in which Torquay will nevertheless play an important role, particularly in the provision of coastal located urban land. Council annually audits and reviews the demand and supply of urban land in its growth towns of Torquay and Winchelsea which assists in planning for the provision and rezoning of land in a timely manner. In this regard, future audits will be considered in both the local and regional context of land supply and the target supply of residential zoned land will be re-examined as part of the next audit in 2007. This target may more likely be in the vicinity of a 5 to 10 year supply.

Tourism Population

Torquay continues to be a popular destination or stop-off point for visitors, with tourism being a significant contributor to the economy. In 2002, an estimated 1.4 million people visited Torquay, including an estimated 493,000 overnight visitors and 915,000 day visitors⁶. For 2006, the Tourism Research and Impact Assessment report prepared for Geelong Otway Tourism, estimated a slightly reduced visitor number of 1.38 million, comprising 800,000 day visitors and 580,000 overnight visitors. It is estimated that overall tourism numbers in the Shire are unlikely to experience any significant growth through to 2015, but that the make up of those visitors is expected to continue the trend of increasing international visitations and overnight stays, and decreasing domestic visitors. This trend is acknowledged in the *Tourism Strategic Plan for the Surf Coast Region*, Urban Enterprise Pty Ltd, 2006 which goes on to make recommendations to help reverse the domestic decline.

The tourism and holiday home role of Torquay and other townships along the Surf Coast means a substantial fluctuation in overnight population occurs throughout the year, with substantial increases during the peak periods (specifically December – January). Table 4.4 below provides an indication of this change, with the difference between the permanent resident population and the overnight peak population in Torquay / Jan Juc being estimated at around 180%. These peaks in population have particular implications in terms of planning for retailing and other services and in designing the road hierarchy and dealing with peak parking demands. It is less of an issue in planning for the provision of community services and facilities and open space, though there may nevertheless be specific implications, such as providing and managing district level open space that may attract high levels of visitor usage.

Table 4.4 Permanent versus Peak Populations, 2004

Location	2004 Permanent Population	Overnight Peak Population, Dec 03- Jan 04	Difference (no.)	Difference (%)
Torquay	5,480	18,700	+13,220	241%
Jan Juc	4,060	8,010	+3,950	97%

⁶ Torquay Jan Juc Retail Strategy Review 2003, *Essential Economics*.

Total	9,540	26,710	+17,170	180%
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Source: *Torquay Retail Strategy Review 2005, Essential Economics.*

Social Infrastructure: Existing Conditions & Future Requirements

Methodology for Determining Social and Recreation Needs

Until recently, there has been little co-ordinated long term planning for the provision of social and recreational needs in the Surf Coast Shire, however a number of strategic assessments have been undertaken in recent years to facilitate projection of future infrastructure requirements. These include:

- **Community Plan – ‘Your Visions’ (2004)**

The Plan was derived from thorough consultation with the community, and includes detailed community priorities relating to service and infrastructure provision in each town.

- **Public Open Space Strategy (2004)**

The Strategy contains an assessment of existing public open space throughout the municipality and an assessment of current needs. It identifies priorities for different types of open space and sporting facilities in Torquay and Jan Juc.

- **Pathways Strategy (2005)**

The Strategy is an outcome of the ‘*Public Open Space Strategy*’ and identifies priorities for walking and cycle paths in Torquay and Jan Juc.

- **G21 Regional Sports Development Plan 2006**

This Study examines the issues impacting on the viability of structured sports within the Geelong Region (including the Surf Coast Shire) and outlines strategies to improve the delivery of sport.

- **G21 Regional Sport & Recreation Infrastructure Strategy 2006**

This Study provides direction for the G21 Councils for the development and provision of high level ‘regional’ sport and recreation infrastructure over the next ten years.

- **Torquay and District Future Children’s Service Needs Analysis (2004)**

This analysis identifies current demand for different children’s services and recommends the construction of a Children’s Services Hub in Torquay as a response to current need.

- **Municipal Early Needs Plan (commenced 2004)**

This Plan analyses future demand for children’s services across the Shire, and will establish priorities for future infrastructure provision.

- **Community Access & Inclusion Action Plan 2004-2007**

This Action Plan provides the framework to address issues in relation to access and equity for all of the Shire’s community.

As part of the preparation of the Torquay Jan Juc Structure Plan, Council appointed ASR Research Pty Ltd to conduct a community infrastructure assessment of Torquay and Jan Juc based on the future needs of the communities. This section is largely based on the findings and recommendations of that report. In undertaking this assessment, ASR:

- Reviewed existing strategies, policies and funding (including those documents referred to above).
- Developed a profile of existing and planned service provision.
- Identified factors which may impact on the Council’s community services programs and community facility requirements (demographics, policy, legislation, industry of sector trends etc).
- Identified community facility needs and the capacity of existing facilities to cater for these needs.
- Identified and analysed facility provision options for the townships and provided a preferred or recommended community infrastructure plan which describes the proposed works, indicative costs and timing requirements for the provision of future community facilities.

Adequacy of Existing Community Infrastructure Provision

An indicative quantitative comparison of the 'desired' and actual provision of community infrastructure in Torquay / Jan Juc was prepared in the 2006 Community Infrastructure Assessment report which provided a useful initial reference point in relation to supply side issues. This supply comparison for recreation items was updated in the Torquay Jan Juc Sports Ground Strategy (March 2007) through a more detailed analysis which included interviews with the local sporting clubs to take into account local peculiarities of Torquay / Jan Juc which dictate variations to the initial standards. The results of this quantum comparison are provided in Table 4.5 below.

Table 4.5: Indicative comparison of Actual and Desired Community Infrastructure Requirements in Torquay / Jan Juc (2006)

Community infrastructure item	Indicative desired requirement in 2006	Actual provision levels in 2006	Current surplus / deficit
<i>Recreation items</i>			
Basketball (indoor competition courts)	1.7	2	0.3
Cricket (ovals)	4.0	2	-2.0
Football (ovals)	4.0	2	-2.0
Lawn bowls (rinks)	1.1	2	0.9
Netball courts (indoor competition courts)	3	2	-1.0
Soccer (fields)	4	2	-2.0
Tennis (courts)	4.1	13	8.9
Council multipurpose leisure centre	0.2	0	-0.2
<i>Residential aged care</i>			
Residential aged care - retirement villages	0.4	0	-0.4
Residential aged care – low care beds	51.1	30	-21.1
Residential aged care – high care beds	40.9	0	-40.9
<i>Children's services</i>			
3 year old preschool registered places	42.6	45	+2.4
4 year old preschool registered places	48.1	45	-3.1
Long day child care registered places	112.3	45	-67.3
MCH sessions	8.7	8	-0.7
Out of school hours care (includes Vacation Care)	157.7	150	-7.7
Playgroups	2.0	2	0.0
<i>Education</i>			
Government Primary Schools	1.1	1	-0.1
Government Secondary Schools	0.4	0	-0.4
<i>Other items</i>			
GPs	9.6	12	2.4
Hospital beds	22.7	0	-22.7
Centre based library	0.2	1	0.8
Neighbourhood houses	0.5	1	0.5
Playgrounds	7.2	7	-0.2

Source: Torquay & Jan Juc Community Infrastructure Assessment 2006, ASR Research Pty Ltd

ASR concludes from this table that in overall terms Torquay / Jan Juc contains a reasonable supply of diverse community infrastructure for a township of its size, with current deficiencies appearing to exist around residential aged care provision and long day child care places (though additional facilities are planned), most forms of open space (particularly active space, as identified in the Open Space Strategy and the Torquay Jan Juc Sports Ground Strategy) and pedestrian / bicycle pathway networks

(as identified in the Pathways Strategy). Of note, this table does not recognise that some of the facilities are shared (ie. no dedicated soccer fields) which limits their availability and places unreasonable demands on the facilities. ASR also suggests that a case could be argued on deficiencies in government primary school and secondary school provision.

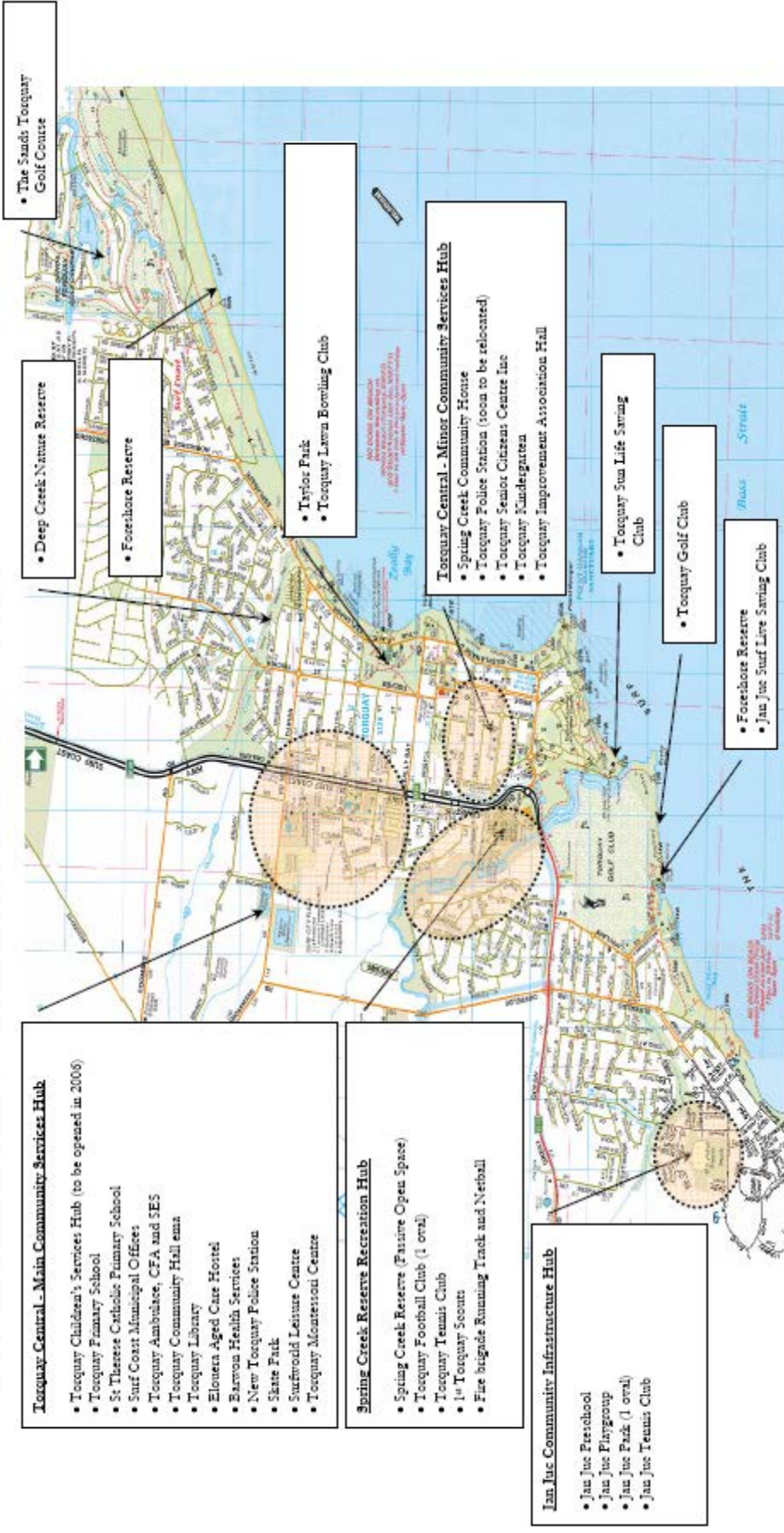
The above is a quantitative assessment only, and the two ASR reports includes a comprehensive qualitative assessment that provides a clearer picture of future needs and options for the delivery of these needs.

Plan 4.2 provides a spatial perspective of the provision of this infrastructure and ASR notes the absence of a multi-functional hub of community infrastructure in Torquay North, though acknowledging that a minor hub is planned for in the Torquay North Outline Development Plan. As depicted by this Map, existing community infrastructure provision is largely contained within the following four hubs:

- Torquay Central – Main Community Service Hub;
- Torquay Central – Minor Community Service Hub;
- Jan Juc Community Infrastructure Hub; and
- Spring Creek Reserve Recreation Hub.

Plan 4.2: Existing Torquay / Jan Juc Community Infrastructure & Infrastructure Hubs

Map 2 - Existing Torquay / Jan Juc Community Infrastructure & Community Infrastructure Hubs



Planning and Design Principles

In planning for the provision of community infrastructure, ASR Research promotes the development of well-integrated, multifunctional hubs. They describe a community hub as a geographic location within a neighbourhood (ie. 2,000 to 8,000 people) containing a diverse range of Council and non-Council community infrastructure within close proximity to one another. Such a hub functions as a place where a broad cross section of the community gathers for the purpose of social interaction and learning and accessing services (eg. retail, recreation and education).

The following table describes a community infrastructure hub hierarchy and a set of desirable community infrastructure elements that may be co-located within each hub type. The table should be interpreted as a guide only. Nevertheless, it can be noted from this table that Torquay / Jan Juc is just now entering a phase of growth that will raise it to a role of being able to support a District level hierarchy of community infrastructure.

Table 4.6: Community Infrastructure Hub Hierarchy

Community Infrastructure Hub Hierarchy	Desirable Hub Co-location elements	Relationship to Activity Centres Hierarchy
Small Area / Neighbourhood	Should consist of at least 2 or more of the following: <ul style="list-style-type: none"> • Multipurpose community facilities • Active open space reserve • Passive open space reserve • Government primary / or other primary school types • Non government agency services • Private sector services such as GP's and long day child care centres and gyms 	Most likely to be co-located with a neighbourhood centre servicing a population of 2,000 to 8,000 people.
District	May contain elements of 'small area / neighbourhood' hub, but also include one or more of the following: <ul style="list-style-type: none"> • Lawn bowls • Neighbourhood house • Indoor recreation facilities (basketball, netball, badminton) • Government Secondary College • District level active open space reserves 	Most likely to be co-located with a neighbourhood centre servicing a population of 9,000 to 25,000 people.
Sub-Municipal	May contain elements of 'small area / neighbourhood' or 'district' hub, but also include one or more of the following: <ul style="list-style-type: none"> • Council provided indoor leisure centres • Centre based libraries • High order active open space reserves 	Most likely to be co-located with either a major activity centre or principal activity centre servicing a population of 26,000 to 50,000 people.
Municipal	May contain elements of listed above, but also include one or more of the following: <ul style="list-style-type: none"> • Tertiary institutions • Public / Private Hospitals • Performing Arts Facilities 	Most likely to be co-located with either a major activity centre, principal activity centre or specialised activity centre, with good access to multiple public transport options. Typically requires a population catchment in excess of 50,000 people.

Source: *Torquay & Jan Juc Community Infrastructure Assessment 2006, ASR Research Pty Ltd*

Coastal Recreation Role

In addition to the traditional community infrastructure expected in a settlement, as with other coastal towns Torquay / Jan Juc benefits from its location on the coast and the range of recreation and social / economic opportunities the coast affords a community. For Torquay / Jan Juc a unique 'surf culture' and identity has developed due in large part to the quality of the surf which exists along its beaches and points. This 'surf culture', in combination with the attractive coastal environment, influences many aspects of life in Torquay / Jan Juc, including:

- The national and international profile afforded from having the only world champion surfing calendar event in Australia at Bells Beach.
- The continual pilgrimage of surfers visiting the area throughout the year.
- Forming the basis of the local economy, as reflected in Torquay being the base of the major international surf companies.
- Being a major attraction for tourists and holiday makers.
- Forming the main recreation and pastime for locals and visitors alike.

With the natural coastal environment, a host of community facilities have developed along the Torquay / Jan Juc foreshore to service activities directly or indirectly related to the coast, including:

- The Torquay and the Jan Juc Surf Lifesaving Clubs.
- The Torquay Angling Club with boat launching facilities at Fisherman's Beach, the marine Rescue Service and the nearby Sailing Club.
- The Adventure Playground opposite Taylors Park.
- The Torquay foreshore caravan park.
- The supporting infrastructure of car parks, access tracks, picnic facilities and toilets dotted along the length of the foreshore.
- Point Danger visitor facilities.

These facilities, as much as any other in the towns, have of necessity grown and been designed to cope with the extreme levels of use they are subjected to over each summer by the locals and the huge influx of visitors, campers and holiday home owners.

Future Needs

Development Phases

In assessing the future community infrastructure needs for Torquay / Jan Juc ASR Research relied on the population growth and capacity figures provided at the start of this chapter. In addition, they considered the next phase of development of Torquay, west of Duffields Road, taking the opportunity to commence planning for this future growth, particularly in respect to the implications it may have on the provision of more facilities at a district (regional) level. Hence the assessment is based on two phases of development:

- Phase 1 – which anticipates the full development of Torquay and Jan Juc within its current urban growth boundary.
- Phase 2 – which anticipates development beyond the current growth boundary west of Duffields Road along the Spring Creek Valley (Spring Creek Urban Growth Corridor – UGC) for a distance of about 1 km. This area is projected to accommodate approximately 5,300 persons.

Demographic Implications

Table 4.4 below provides data on the projected populations of the target age cohorts for key services and facilities from 2001 to full build out as estimated by ASR Research. This serves to highlight the longer term population forecast for the town (and age make up of this population), and assist in planning for this at an early stage.

Table 4.7: Target Population Projections for Key Community Facilities - 2001 to Build Out

Service Type	Age	2001 ⁷	Build Out (including Spring Creek UGC)	Build Out (excluding Spring Creek UGC)	Change in Population +/-	Change in Population +/-
Maternal and Child Health Services, Playgroups	0-3	502	1,514	1,225	+1,012	+723
Preschool Services	3-4	252	833	674	+581	+422
Long Day Child Care, Occasional Child Care, Playgroups, Family Day Care	0-6	873	2,813	2,276	+1,940	+1,403
Primary School, After Hours School Care, School Holiday Programs	5-12	989	3,440	2,783	+2,451	+1,794
Various Youth Service Programs, School Holiday Programs	12-18	753	2,710	2,193	+1,957	+1,440
Senior Citizens Groups, HACC Services	55+	1,411	7,712	6,240	+6,301	+4,829
HACC Services, Nursing Homes/Residential Aged Care/ Centre Based Support Service	70+	586	3,270	2,645	+2,684	+2,059
Total Population Neighbourhood Houses, Community Halls / Meeting Space / Community Arts / Libraries	0-99	8,003	29,481	23,851	+21,478	+15,848

Source: Torquay & Jan Juc Community Infrastructure Assessment 2006, ASR Research Pty Ltd

Passive Outdoor Recreation Needs

The 'Surf Coast Open Space Strategy' (2004) identifies that the provision and distribution of public open space within Torquay and Jan Juc is inadequate, with a critical shortage of active sporting facilities, and significant numbers of residents living more than 400-500m safe walking distance from open space providing a range of facilities. The Strategy notes that whilst many Victorian towns of Torquay's size contain a large Council park or reserve with district or regional level facilities for informal recreation, there is no such Council reserve in Torquay or Jan Juc. The current lack of open space provision reflects upon the dominant role of foreshore Crown land in providing for informal recreation, and the historic role of Torquay Jan Juc as primarily a tourist / holiday town, a role that is rapidly changing with the increasing permanency of its growing population. With the continuing growth of Torquay the past reliance on the foreshore for open space will change. This will be necessary to ensure the foreshore is not degraded from over use and to ensure provision of a range of outdoor recreation spaces and activities within reasonable access of everyone in the community.

Clause 56.05 of the 'Surf Coast Planning Scheme' sets out minimum standards for provision of public open space in new subdivisions, including requirements for different sized areas based on a three tiered hierarchy of regional, district and local parks as follows:

- Regional linear open space should be incorporated where appropriate.
- District parks of 3ha minimum, combining passive and active use should be provided within 2 kilometres of all dwellings.
- Local parks of a 1ha minimum, for active and passive use, should be provided within 500m safe walking distance from all dwellings.
- Small local parks should be provided within 150m to 300m safe walking distance of all dwellings.

⁷ Source: ABS 2001 Census

Torquay Jan Juc is well located to regional scale open space in the coastal foreshore and is in close proximity to the Ironbark Basin, Great Otway National Park and Barwon River Linear Park in Geelong.

District Parks in the form of active recreation open space are discussed in the next sub-section. These parks should be designed to incorporate passive open space and playgrounds to re-enforce their role as District Parks. Other District Parks that provide more passive open space experiences include the foreshore, Taylor Park in Central Torquay and Grass Tree Park on the north fringe of the town. Some of these spaces lack the infrastructure to respond adequately to their level, or potential level, of use.

The primary purpose of local-level parks is to provide space for informal play and recreation within walking distance of every household (typically 500metres). Traditional smaller local parks are now generally considered to be too limited in their functionality and flexibility and there has been a shift towards providing the equivalent space in areas of district open space and parks of at least 1ha in area, with good linear connections. The overall quality of such an open space network is felt to compensate for instances where dwellings may be slightly more than 500 metres from the nearest parcel of open space.

The foreshore areas of Torquay and Jan Juc are important regional linear reserves, and combined with creek reserves there is a developing network of linear reserves that provide opportunities for interconnected paths. However much more is still required, particularly due to the lack of footpaths and shared paths. The '*Pathways Strategy*' identifies options and priorities for future paths to enhance linkages both between and within the towns, identifying a pathway hierarchy and a 10 year works program. A key policy of the *Pathways Strategy* is to provide 'access for all'.

Key management strategies of the *Open Space Strategy* that are relevant to the Torquay and Jan Juc Structure Plan include:

- Locating public open space within 400-500m of all households.
- Improving the quality of existing public open space, including playground equipment, signs, paths, furniture, barriers, public art and landscaping.
- Addressing the current under-provision for active sports.
- Ensuring that future public open space is developed at the time of subdivision.
- Progressively implementing Master Plans for the Spring Creek Recreation Reserve, Bob Pettit Reserve, Whites Beach Foreshore Reserve and Deep Creek Linear Reserve.
- Supporting proposals by the Great Ocean Road Coastal Committee to improve facilities adjacent to Wombah Park.
- Developing Grass Tree Park as a major town/conservation park in the medium to long term.
- Developing Landscape and Management Plans for Spring Creek and Jan Juc Creek.
- Incorporating natural and landscape features as key design elements in layouts of new subdivisions (eg incorporating habitat corridors, waterways and remnant vegetation in open space).
- Developing paths that:
 - Connect residential areas with open space, sporting facilities and community facilities such as schools, libraries, shops and the foreshore
 - Develop looping links between the creeks and foreshore.

The *Open Space Strategy* states that for new residential estates in Torquay approximately 10% of developable land should be set aside for public open space to adequately provide for local and neighbourhood parks, district parks, sporting facilities and trails.

Active Outdoor Recreation Needs

ASR Research recommends the following quantitative demand for outdoor recreation facilities, based on a detailed analysis of Torquay Jan Juc's requirements (refer to Sports Ground Strategy):

Table 4.8 Outdoor Recreation Quantitative Needs for Torquay / Jan Juc

Facility	Total with Spring Creek UGC @ Full Development	Total without Spring Creek UGC @ Full Development	Current deficit / surplus compared to full development with Spring Creek UGC	Current deficit / surplus compared to full development without Spring Creek UGC
Football ovals	6	4	-4	-2
Cricket ovals	6	4	-4	-2
Soccer fields	5	3	-5	-2
Tennis courts	12	10	0	+3
Lawn bowls	3	3	-1	-1

Source: Torquay & Jan Juc Community Infrastructure Assessment 2006, ASR Research Pty Ltd and Torquay & Jan Juc Sports Ground Strategy 2007, ASR Research Pty Ltd.

The above table assumes existing use of the oval in the Quay Estate. It also assumes the soccer field at the Bob Pettit reserve to be a permanent facility, when in reality it is only a temporary measure for junior players only.

Allowing for the existing provision of facilities and having consideration to the anticipated development scenario, the application of standard provision ratios and localised requirements a complete list of additional outdoor recreation facility requirements is shown in the following Table (4.9). This provision seeks to avoid single/stand alone soccer, cricket and football grounds which from a practical and management point of view are undesirable. A major issue in the provision of these facilities is dealing with the lack of suitable, flat land in the Spring Creek UGC that is of sufficient size to provide for a major active recreation facility. This has necessitated planning for the provision of active open space for this precinct within the Torquay North precinct. In compensation, a major informal active recreation area, incorporating an adventure playground, is recommended for the Spring Creek UGC.

The outdoor recreation needs do not include the less formalised activities associated with the coast, including swimming, surfing, snorkelling, boating etc which attract a high level of patronage from outside Torquay / Jan Juc, particularly over summer.

Table 4.9: Summary of Additional Outdoor Active Recreation Needs for Torquay / Jan Juc

Precinct	Land Area (Ha)	Additional Facility	Recommended Location
Torquay Central	1.0	Re-alignment of soccer field on Torquay Primary School site	Torquay Primary School soccer field re-aligned to make provision for aquatic facility.
	Existing	Tennis courts (4).	Expand the existing facility at Spring Creek Reserve and reconstruct 2 asphalt courts.
Torquay North	7	Football/cricket oval (2) (incorporating soccer field (2))	Adjacent Horseshoe Bend Road and the existing junior oval. Recommend integration with proposed primary school site. (As per the TN ODP). Expand or duplicate the proposed new pavilion.

	16	District Active Recreation Park comprising: Football/cricket ovals (2) Soccer fields (3) Outdoor Netball courts (4).	Preferred location is in a new main community hub in the Torquay West precinct, however due to topographical constraints a flatter site in the Torquay North Precinct adjacent the Surf Coast Highway is recommended.
Jan Juc	-		
Spring Creek UGC	5	Informal active recreation area, incorporating an adventure playground.	To be determined as part of preparing an Outline Development Plan for the precinct.

Community and Indoor Recreation Facility Needs

To guide the provision of social infrastructure, the Community Infrastructure Assessment Report of ASR Research promotes a broad set of planning and design principles, specifically related to the development of community hubs. These include:

- The underlying purpose of a community hub is to be a vibrant community and civic place and hence social and recreation resources should be concentrated in a hub to maximise resources and opportunities for social interaction.
- Ensure functional needs are configured to maximise urban design and public art outcomes.
- Ensure an equitable access to a range of community facilities that meet the functional needs of the community.
- Ensure integration with public and private transportation, including pathways, having regard to issues of access and safety.
- Locate open space with community facilities in a manner that builds on the unique character of the area, creating accessible and attractive nodal points.
- Attract diverse demographic groups and interests.
- Ensure a cohesive relationship between all elements of the built form.

The following section describes the community facilities that will be required (new or upgrades) to meet the needs of the Torquay Jan Juc population.

a) Leisure (aquatic/fitness) Centre

Aquatic/fitness centres cater for people in all age groups and ASR use a common provision ratio benchmark of 1:40,000 people. (Other metropolitan strategies have suggested a practical experience ratio of 1:60,000 would adequately meet demand). Of course such benchmarks often do not take into account 'non-metropolitan' factors such as relative isolation and the influence of a seasonal tourist population. Torquay / Jan Juc has a small private pool and a pool/gym is available to members only in The Sands Residential Golf Estate. While a Council operated centre may be desired by a large proportion of the community, the cost of developing and maintaining such a centre may be prohibitive. In this regard, Council is working with the Surf Coast Community Leisure Centre Action Group to fund a feasibility study into the provision of a leisure centre facility in Torquay.

A number of leisure centre facilities are available in Geelong within a 20 minute drive from Torquay, including a new regional centre to be developed in the short term by the Greater City of Geelong at Waurin Ponds. Other options are also being investigated, including the provision of a facility at the Torquay Primary School which may include limited public use.

b) Stadium

ASR Research suggest an indicative benchmark for the provision of an indoor recreation stadium as 1:10,000 people aged from 0-99, though the main user-group would be aged 8-40 years. More specifically, the provision of 1 court per 2,500 persons within this 8-40 age range translates to a requirement of around 4 additional courts. The integration of a stadium with a P-12 government school is one option for the provision of such a facility. However, the limitations that joint use

agreements place on public access during school times can hinder the availability of the facility to some sectors of the community and are hence not the preferred option.

c) Centre based library

Libraries service a broad cross section of people in all age groups and are generally a higher-order facility of regional status with a catchment of 40,000 people. As a major community facility libraries must be accessible and occupy prominent sites, preferably within an activity centre or community hub. Torquay currently has a branch library occupying a leased site in the Surf City complex, which is in good condition, but will not be large enough to cater for the projected growth of Torquay / Jan Juc.

Further separate analysis is required to determine the preferred long term future location of the library. In the short term the current arrangement appears satisfactory.

d) Community Theatre

A modest sized community theatre / performing arts centre would cater for the needs of people from all age groups and could also be a valuable facility for any local schools. The design of any such facility will need to be particularly cognisant of the needs of community groups most likely to utilise and benefit from the centre to maximise its potential.

e) Education Facilities

ASR Research notes that the future provision of government schools represents one of the more significant community infrastructure issues for the area. Their assessment concludes that an additional two government primary schools will be required and one government secondary college. The preferred location of these is for a primary school in Torquay North and a primary combined with a secondary college (P-12 facility) within the Spring Creek UGC. The provision of these two schools is considered by ASR to be critical to the success of key community infrastructure hubs proposed for both precincts. Further, the provision of these resources will create the potential for other important community infrastructure facilities (possibly under joint use arrangements) to be provided in a cost effective manner.

In addition to government schools, there is likely potential for the establishment of a private school, in addition to the existing Catholic Primary School, within Torquay. While a Structure Plan cannot plan for the establishment of a private school, Council would support and give whatever encouragement it is able to facilitate any proposal to locate within the Torquay / Jan Juc settlement.

f) Preschools

With the recent opening of the 'children's services hub' at Grossmans Road, the demand for preschool places is catered for in Torquay Jan Juc through three pre-schools, two of which are sponsored by the Council. However, with the growing demand for three year old preschool programs the long term ability for these facilities to absorb three and four year old demand will be stretched.

ASR Research anticipates the need for an additional double preschool in both Torquay North and the longer term urban growth corridor of Spring Creek. These facilities are recommended to be provided in multi-purpose community centres.

g) Maternal and Child Health

The Maternal and Child Health (MCH) Service is available for all Victorian families with children aged 0-6 years. It supports parents, monitors infant development and offers information and advice on a range of parenting and child development matters. The current MCH has recently relocated from the Spring Creek Community Centre to the children's services hub in Grossmans Road and has capacity to meet future growth needs. A MCH consultation space should be planned for within the longer term multi-purpose community centre recommended for the Torquay West growth precinct.

h) Long-Day Child Care

There is significant interest from the private sector to construct additional centres offering Long Day Care, which is expected to accommodate growth in demand arising from projected residential growth. The Council does not therefore plan to develop any Shire managed long day care facilities in the future.

i) Multi-purpose Community Centres

A multi-purpose community centre can be designed to accommodate a combination of preschools, maternal and child health, arts & cultural spaces and meeting spaces. Two new centres are recommended by ASR Research to be planned for the growth precincts of Torquay North and the Spring Creek UGC, to accommodate the above services and facilities for these new neighbourhoods. The centres should incorporate large and small scale meeting space capacity to provide flexibility to meet a range of needs of the communities.

Table 4.6 provides a summary of the community and indoor recreation facilities that will ultimately be required in Torquay / Jan Juc growth areas (including the anticipated first stage of growth west of Duffields Road). With the exception of government schools, all of these facilities and services will require ongoing Council funding or involvement in their operation.

Table 4.10: Summary of Community and Indoor Recreation Facility Needs

Precinct	Facility	Elements	Recommended Location
General	Public Art	<ul style="list-style-type: none"> ▪ Infrastructure program 	Across all precincts
Torquay Central	Existing Community House (Spring Creek) Existing Senior Citizens Centre.	<ul style="list-style-type: none"> ▪ Upgrade and add new meeting room spaces and storage. ▪ Upgrade. 	Price St Minor Community Hub
Torquay North	Multipurpose community centre Government Primary School Stadium	<ul style="list-style-type: none"> ▪ Double preschool ▪ Meeting space ▪ Consulting spaces for non government organisations ▪ School buildings and grounds ▪ 4 multipurpose courts (netball, basketball etc) 	Minor Community Infrastructure Hub Adjacent the existing oval (As per the TN ODP) As per the TN ODP. With the District Active Recreation Park.
Spring Creek UGC	Multipurpose community centre Government P-12 School Community theatre	<ul style="list-style-type: none"> ▪ Double preschool ▪ Large & small meeting spaces ▪ Dedicated arts / cultural spaces ▪ Consulting spaces for non government organisations. ▪ School buildings and grounds ▪ 200 – 300 seat capacity. 	Major Community Hub, in conjunction with a local park or possible future activity centre. Location will be influenced by topographical constraints and preference to be located adjacent public open space. Preferred location is in a new or existing community hub or associated with some other Council / community facility.
Jan Juc	-	-	-

Provision of Coastal Recreation Infrastructure

In recognition of the beach and foreshore providing residents and visitors open space to recreate and relax, Council has developed a partnership to service the permanent and visitor populations. The partnership involves Council representatives on the Great Ocean Road Coast committee and a joint SCS/GORCC working party that discusses items of mutual interest (dogs on beaches, environmental management etc) and recommends funding / implementation of joint projects. An important project of the joint working party has been the rationalisation of land management by SCS and GORCC on behalf of the Crown.

Council has developed a Memorandum of Understanding (MOU) that provides policy and guidelines for the Shire to fund community assets on the coastal reserve, managed by GORCC. The possibility of coastal recreational asset funding through the Torquay Jan Juc Development Contributions Plan is being investigated. The only means that GORCC has available to secure revenue for community assets on the coastal reserve is caravan park fees, minor rental fees, pay parking and minor State Government grants.

The Torquay Jan Juc DCP could cover toilets, local / regional play parks, community buildings, pathways, car parks etc.

Retail and Commercial Needs

Background

Planning for retail growth in Torquay and Jan Juc has been guided by a series of reports prepared by Essential Economics, including the '*Torquay Town Centre Retail Strategy*' of 1999 which supported the provision of a second supermarket in the Torquay Town Centre and the concentration of retail activity in and around Gilbert Street. In 2003, this was followed up with the '*Torquay Retail Strategy Review*' which noted that the 1999 strategy had been successful in reducing the extent of 'escape spending' (ie that part of residents' spending which is directed to other centres beyond the main trade area). 'Escape spending' had come down from 52% of total resident spending in 1999 to 46% in 2003. The Review emphasised the importance of continuing to direct retail growth to the Town Centre as a means of expanding the range of retail and other facilities and services provided, and of further reducing the level of 'escape spending' to maximise local employment growth in Torquay and Jan Juc. A strategy of westerly expansion was re-affirmed that included the former primary school site and this site was rezoned for commercial use in 2004.

The *Torquay Retail Strategy* has been more recently updated by Essential Economics in 2005 and this report guides the provision and planning for retail growth in the Torquay Jan Juc Structure Plan out to around 2030.

Retail Floor Space Demand

The retail hierarchy servicing the Torquay residents is summarised in Table 4.7 below. It acknowledges Geelong as the regional and sub-regional centres, with Torquay itself providing a traditional town centre retail and commercial environment, with a trade area influence extending as far as Lorne along the coast.

Table 4.11: Retail Hierarchy, Torquay Town Centre MTA

Retail Centre	Retail Facilities	Direct Distance from Torquay TC (km)
Regional		
Geelong CBA	Department stores, discount department stores, specialty shops, entertainment, business services, etc serving a regional catchment	20
Sub-regional		
Waurm Ponds	Nearest sub-regional centre includes Target DDS and two supermarkets	18
Large Town Centre		
Torquay Town Centre and environs (Bell St, Esplanade)	Two supermarkets (Safeway and Foodworks), specialty stores, business services, cafés and restaurants, etc	-
Small Town Centre		
Lorne	Small IGA, specialty stores, cafés and restaurants, etc. Large tourist component	37
Anglesea	Small IGA supermarket, specialty stores, cafés restaurants, business services, etc.	17
Local Centres		
Jan Juc	Local shop including a hotel, pharmacy, general store, and two cafés.	3
Aireys Inlet	Bakery, cafés, general store, real estate agents, etc serving the local catchment.	28
Specialist Centres		
Surf City	Major retail destination for surf related apparel and equipment. Major surfing brands represented including Rip Curl, Quicksilver, Oakley etc as well as seconds outlets.	1

Source: 2005 Torquay Retail Strategy Review, Essential Economics Pty Ltd

The Torquay Town Centre is the largest retail destination in the Surf Coast Shire with approximately 11,050sqm of retail floorspace as surveyed in April 2005. The main presence is food retailing which includes two supermarkets, supported by specialty non-food retailers, particularly apparel, and food catering (cafes, restaurants and take-away). In addition to the main town centre, Torquay has a major specialist centre on the Surf Coast Highway, specialising in surf related apparel and equipment, a strip of mainly food catering and tourist oriented retailing in Bell street, and a small group of shops serving the local Jan Juc catchment.

Table 4.12: Retail Floorspace, Torquay Town Centre MTA (April 2005)

Retail Centre	Food Retail	Food Catering	Non-Food	Retail Services	Total Retail (Occupied)	Vacant Retail
Torquay Town Centre	5,510m ²	1,500m ²	3,390m ²	630m ²	11,030m ²	400m ²
Surf City	100m ²	990m ²	4,720m ²	80m ²	5,790m ²	100m ²
Other Torquay	340m ²	1,830m ²	460m ²	310m ²	2,940m ²	80m ²
Jan Juc	100m ²	330m ²	100m ²	80m ²	610m ²	100m ²
Torquay - Total	6,050 m ²	4,650 m ²	8,670 m ²	1,100 m ²	20,370 m ²	680 m ²

Source: 2005 Torquay Retail Strategy Review, Essential Economics Pty Ltd

Based on the overall analysis of the 2005 Review, Essential Economics forecast that in addition to the current 23,000m² of retail floor space in the main trade area, a further 10,600m² of floor space would be required to meet demand by 2011, rising to an additional 19,000m² in 2021 and 55,000m² in 2031. These forecasts are based on the assumption that:

- Population growth in the main trade area is forecast to increase from 18,400 in 2004 to 25,480 by 2020 and 29,260 by 2030, with over two-thirds of this growth occurring in primary trade area of Torquay and Jan Juc.

- Overall per capita retail spending by residents in the main trade area is forecast to increase by around two-thirds between 2004 and 2020 from \$181.7 million to around \$301.8 million (expressed in 2004 dollars).
- Retail turnover in the Torquay trade area attributable to visitors and tourists is estimated to increase from \$68 million in 2004 to \$84 million by 2011 and \$109 million by 2020, allowing for growth in visitor numbers of 2% per annum and increased spending per visitor of 1%pa.
- There has been a modest decrease in escape spending in the Surf Coast region over the past five years or so, and in 2004 was estimated at around \$74.3 million or the equivalent of 41% of the trade area retail spending. This percentage is projected to remain fairly constant through to 2020.

An underlying principle of the retail strategy for Torquay is to ensure that the important role of the Torquay Town Centre is maintained and strengthened, and that further fragmentation of retail floor space within Torquay is avoided. The Town centre is thus identified as the preferred location for a little over half of the estimated future retail floorspace allocation to serve the trade area.

Essential Economics estimate demand for an additional 7,000m² of retail floor space in the Town Centre (including 4,000m² associated with the new Torquay Central development on the former school site) by 2020, rising to 9,500m² in 2020.

At the same time the importance of the tourism retailing role of the Surf Coast Highway precinct (including Surf City), is recognised with demand for floor space on the Highway forecast to be an additional 3,100m² by 2020 and 4,100m² by 2030.

New demand for bulky goods retailing accounts for the allocation of the bulk of the balance of the forecast retail floorspace, with a reduced allocation to smaller neighbourhood precincts in Jan Juc and Torquay North. Refer to Table 4.9 for a distribution of forecast floor space demand across the retail hierarchy.

Table 4.13 Indicative Forecast Retail Floorspace Allocation

Centre	Current	2020	2030
Torquay Town Centre (existing)	11,050	14,000	15,500
Torquay Primary School Site	-	4,000	5,000
Total Torquay Town Centre	11,050	18,000	20,500
Surf City	5,900	9,000	10,000
Baines Crescent (Bulky Goods)	-	2,000	3,000
Other Torquay/Jan Juc	3,550	4,200	4,700
Total Torquay	20,500	33,200	38,200

Source: 2005 Torquay Retail Strategy Review, Essential Economics Pty Ltd

Commercial Office Space

Essential Economics notes that commercial office space component of the Torquay Town Centre is currently equivalent to around 25% of the total retail floorspace figure. Assuming this rate to be maintained, then office floorspace could be expected to grow from 2,900sqm in 2004 to around 5,000sqm by 2030. Essential Economics notes that this in fact is likely to be exceeded somewhat due to the fact that as the permanent population of Torquay grows, a market for office tenancies greater in size than the current standard tenancy of around 100sqm will develop as government support services and other commercial tenants with a larger floorspace requirement seek to locate in the town.

From a land use point of view however, the retail study notes that much of this additional office space will be able to locate on first and second floor locations, above retail tenancies.

Commercial Spatial Allocation

The review of the Torquay and Jan Juc retail strategy reinforces the past strategic planning direction for Torquay and Jan Juc and provides the following key conclusions and recommendations:

Torquay Town Centre

The Torquay Town Centre is the primary retail and commercial centre serving Torquay and the entire main trade area. This role is to continue to be reinforced and by 2030, the town centre (including the primary school site) is forecast to contain around 20,500m² of retail floorspace including expansions to both of the existing supermarkets and increase in specialty floorspace.

'Torquay Central' (the former primary school site) is to be developed with specialty shops and is identified as having the potential in the longer term to locate a non-food based anchor tenant for the western end of an expanded town centre. Such a development would serve as the effective western end of the Torquay Town Centre with no further retail and commercial development located west of the site.

Integration of 'Torquay Central' into the Torquay Town Centre should be facilitated by appropriate urban design principles to guide development in the area between Payne Street and Pearl Street. Ideally, there should be a high degree of accessibility and permeability between 'Torquay Central' and the balance of the town centre. In this context it is recommended that retail and commercial development be promoted on the northern side of Bristol Road to the west of Pearl Street at least sufficient to link with the Torquay Central development, with possible further contiguous expansion to the western edge of retail/commercial development on the former school site if required to meet future retail floorspace demand. The redevelopment of the block between Payne Street and Pearl Street may also benefit from the inclusion of the rear half of the lots comprising 10 to 18 Boston Road. This greater depth may provide more opportunity to integrate the town centre on either side of this block through appropriate urban design. The rezoning of this portion of 10 to 18 Boston Road should only be considered if the opportunity presents itself as a consolidated proposal as piecemeal development would be unlikely to achieve any benefits.

The Zeally Bay Road office precinct is recommended to be opened up for a mix of retail and commercial development. This would not compromise the ability of the Torquay Town Centre to develop an additional non-retail office component and would create additional development options for adding specialty retail floorspace to the Torquay Town Centre.

The Special Use Zone (Schedule 5 – Tourism Development Precincts) as applied to the lots fronting Gilbert Street arose from the intent of promoting a tourist precinct in Gilbert Street, spilling around into The Esplanade. While there remains merit in this intent, the extent of land zoned Special Use 5 is extensive and proving difficult to rent due to the limitations on the form of retail uses permitted. The rezoning of this end of Gilbert Street to Business 1 will allow market forces to determine the type of retail occupancy of these premises, while Council can continue to encourage a tourist element through the appropriate street treatment. Any rezoning could extend to stop just short of the corner site on both sides. The boundary alignment will be dependent on the form of redevelopment of the two corner sites.

The Esplanade, with its frontage to, and association with, the foreshore and the specialist marketing opportunity this affords, will continue to be promoted solely as a tourist retail / accommodation precinct. The Special Use 5 Zone allows a range of uses, including accommodation (motels, group accommodation, tourist apartments), place of assembly (incl cinema) and other tourist developments that would mix well with and support a range of restaurants, cafes and tourist shops. To encourage the concentration of food premises as a major part of the tourist retail mix within this part of The Esplanade the establishment of restaurants along The Esplanade outside the Special Use Zone should be specifically discouraged. This policy approach has the additional benefit of assisting in preserving the residential amenity and streetscape of the balance of The Esplanade, which is a fairly unique characteristic of Torquay,

Neighbourhood Centres.

The Jan Juc Neighbourhood Centre has limited existing provision of retail floorspace (approximately 1,000 m²), and a recent permit has been issued for three shops (261 m²) and two offices (102 m²).

Beyond that there is capacity for a further 300 m² of commercial floorspace on existing vacant lots in the Business 1 zone. With little further capacity for residential growth in Jan Juc, the existing level of business zoned land at this location is considered to be sufficient to meet the day-to-day needs of residents and visitors.

The Bell Street activity centre is near fully developed, with limited opportunity for redevelopment of some larger sites in the medium to long term. Expansion of this centre is not being promoted at present. Recent approval of a restaurant in the adjacent Residential 1 Zone highlights the potential for the non-planned expansion of the centre (limited in commercial uses to restaurants and plant nurseries) along Bell Street. As with the previous discussion on The Esplanade (under Torquay Town Centre above), discouragement of the establishment of restaurants outside the business zone would help to support the continuing compactness and vitality of the Bell Street activity centre and preserve the residential amenity and appearance of the section of Bell Street between the activity centre and The Esplanade. This is likely to also assist in supporting the redevelopment of The Esplanade contained within the Special Use 5 Zone adjacent the main Town Centre.

A small retail node of around 500m² (and no more than 1,000m²) is recommended for a prominent site in Torquay North to serve residents of this area with basic convenience retail facilities.

In the long term (post 2030) scenario, there may be potential for a larger neighbourhood activity centre of up to around 6,000m² in the Spring Creek UGC which would serve a catchment based to the west of the Surf Coast Highway. Due to the long-term nature of this opportunity, it should be the subject of future investigation subject to the long term growth strategy for the town.

Surf Coast Highway Tourist Retailing.

There is expected to be strong demand for additional retail development in the Surf City precinct on the Surf Coast Highway over the next 25 years. While this development continues to be oriented towards tourists and visitors, it will be of limited competitive relevance to the Torquay Town Centre. The Surf City precinct should continue to be the focus for tourist retailing, not conventional retailing for residents.

Bulky Goods Retailing.

There is likely to be substantial demand for retail in the bulky goods categories in the main trade area over the next 25 years. While most of this spending is likely to escape to the major bulky goods retailing areas in Geelong, there is scope for a "secondary" bulky goods retailing precinct in Baines Crescent comprising smaller, mainly independent bulky goods operators. Zoning provisions for this area may need to be reviewed to facilitate this use.

Industrial Land

The 'Assessment of Industrial Land Requirements' prepared in 2001 by Essential Economics for the 'Torquay North-West Outline Development Plan' (2002) established strategic justification for establishment of a new industrial estate north-west of Torquay. It acknowledged that land within the Industrial 3 Zone (IN3Z) at Baines Crescent adjoining Surf City had almost fully developed, with only one lot available for sale and the few remaining vacant allotments being held for expansion of existing activities. It further identified an unmet demand for industrial land in Torquay of approximately 10ha due to lack of available land.

In its expert witness statement to the Advisory Panel hearing submissions to Amendment C6 in 2004, Essential Economics forecast that approximately 61ha of additional industrial land would be required in Torquay by 2031. This forecast included land to satisfy latent demand, as well as new demand for land generated by (amongst other things):

- Expected population growth in Torquay and its surrounding area
- Tourism growth.
- Additional surf related businesses seeking to cluster at Baines Crescent close to Surf City.

- Businesses seeking to establish in Torquay as opposed to Geelong (as the town reaches a size where businesses can rely on the local market rather than trade in Geelong), particularly where the businesses serve towns such as Anglesea and Aireys Inlet which are further from Geelong.

Essential Economics forecast that 43ha of new land would be required by 2021, and a further 18ha by 2031 (total of 61ha). Approximately 26ha of land fronting Coombes Road and Surf Coast Highway was zoned IN3Z in 2004 to cater for part of this demand, with approximately 20ha of vacant rural land immediately to the west between the IN3Z and Messmate Road identified for long term expansion as demand warrants.

Although a small amount of new industrial/service business development will occur in the Baines Crescent estate, it is expected that the majority of new development will occur in the new estate at Coombes Road. Expansion of the Baines Crescent estate is not possible due to the constraint of surrounding residential development. It is anticipated that as the new estate at Coombes Road is established, some firms in the Baines Crescent estate (eg motor mechanics and the bus depot) may relocate, providing an opportunity to minimise amenity impacts of commercial uses on surrounding residents and to redirect the role of the estate in accommodating lighter industrial uses, limited box retailing and service industry.

Opportunity exists for long term industrial growth beyond the time frame of this Strategy to be accommodated on the west side of Messmate Road. In this regard it will be important to ensure that use and development of that land does not prejudice or inhibit the long term growth path for industrial land. Monitoring of supply and demand of industrial land should be undertaken on a regular basis to ensure that adequate land availability is maintained.

Development of the industrial estate (and the strip of low density residential development fronting Coombes Road south of the estate) will be guided by the Development Plan to be approved under the Development Plan Overlay. The Development Plan is to include a Concept Plan that will outline the indicative design of the estate, including staging and access from the Surf Coast Highway, and the provision of environmental, visual and amenity buffers to adjacent land uses. It is expected the estate will provide a range of lot sizes to accommodate uses of different requirements and may include some larger sites to accommodate corporate enterprises attracted to establish by the towns surfing and lifestyle image.

Tourism – Facilities & Accommodation

The significance of tourism to the economy of the Surf Coast Shire is well documented, and a number of the facilities and services available to the Shire's residential community would not be viable, particularly in the off-peak seasons, except for the high incidence of visitors at peak holiday periods. Tourism is not a stand alone sector, but is closely linked with many facets of community economic development. It involves visitor accommodation, restaurants and cafes, retailing, recreation and leisure, transport etc, and provides considerable support to local building and construction activities and to other services ranging from architects and accountants to lawyers and health care. Tourism activities that are wedded to the protection of the community's lifestyle and environmental values will continue to be promoted and encouraged in Torquay / Jan Juc for the economic and social benefits they bring to the town.

In general, tourism activities, whether accommodation or other activities, (conferencing, dining, leisure or recreation) are discretionary uses within most urban zones and do not require site specific zoning. The promotion of the surf based and associated retailing on the Surf Coast Highway is an exception due to the retailing emphasis. Nevertheless, there are a number of sites that warrant identification as potential tourist activity sites (or sites with medium density development potential), including the Burnell Caravan Park, Ocean Views Estate south-east corner adjacent Spring Creek, and the golf courses. Both golf courses are private courses and The Sands is already extensively developed with tourist accommodation and associated activities. The Torquay Golf Course would similarly appear to have opportunities for the provision of tourism accommodation and associated uses to complement existing recreational facilities on the land. Support for the use and development of land within the Torquay Jan Juc urban settlement for tourist related activities would of necessity be considered in the context of integration with the preferred neighbourhood character.

The current land use zoning of the Torquay Golf Course implies that the site is public land, which for the most part is not the case. A review of the zoning of the Torquay Golf Course land is recommended, with a view to appropriately reflect the site's ownership status, use and values.

Transportation: Existing Conditions and Future Requirements

Existing Conditions

The existing road hierarchy for the Torquay Jan Juc area is depicted in Plan 4.3 as adopted by Council to assist with the planning of future development and traffic management. The Surf Coast Highway and Great Ocean Road are the principal access routes to Torquay and Jan Juc, connecting the towns with Geelong and smaller towns along the coast respectively. These are both VicRoads Arterial routes and are briefly described as follows:

- Surf Coast Highway is a divided dual lane carriageway with on-road cycle lanes and connects Geelong and Torquay. Within the town, it divides the older part of Torquay, including the town centre and newer residential development to the north-east, from the emerging residential development to the west. The crossing of Spring Creek marks the beginning of the Great Ocean Road.
- The Great Ocean Road is a single lane carriageway and provides the primary access to Jan Juc township. To the west, it follows Victoria's south-west coastline to Warrnambool.

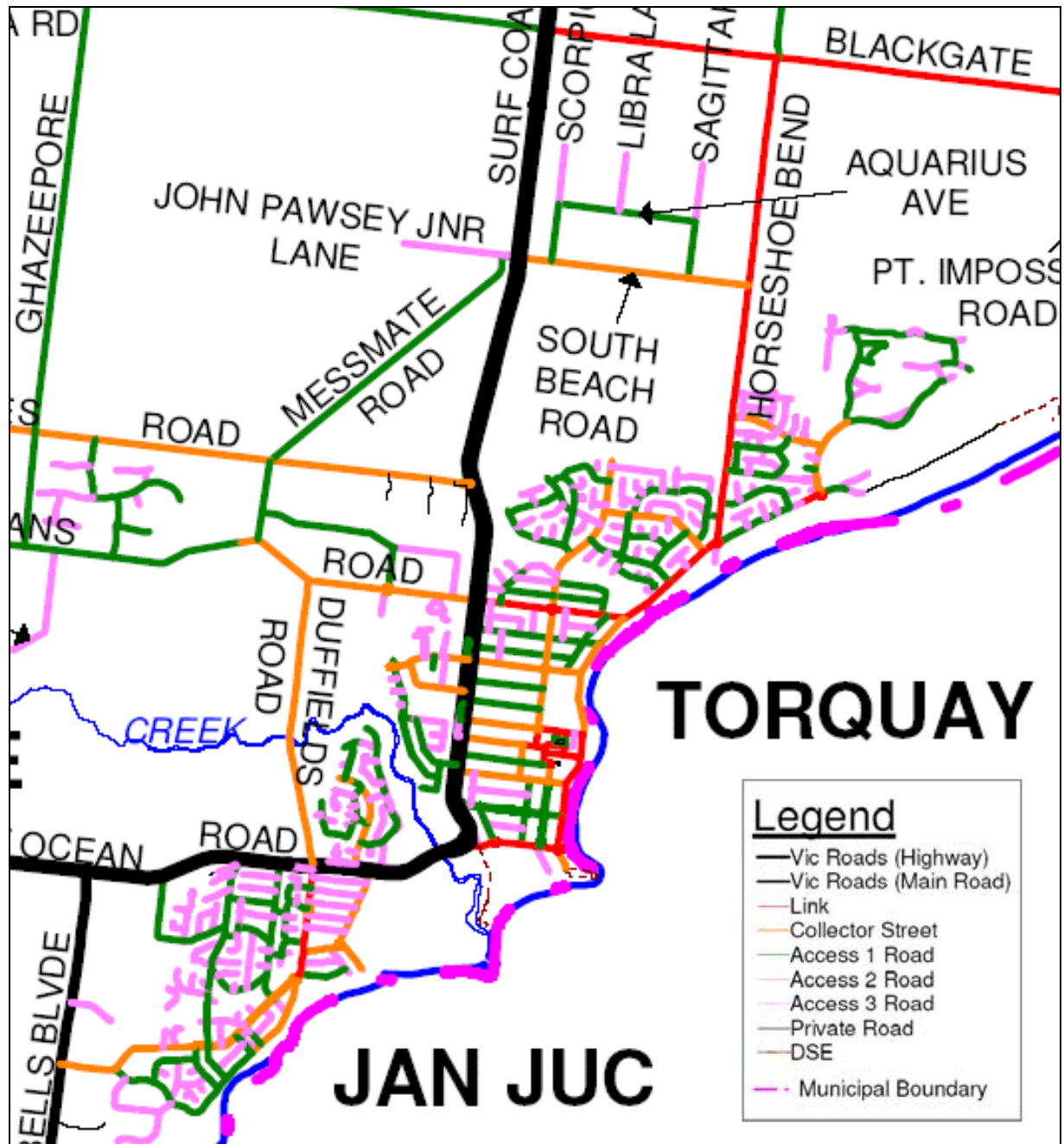
Secondary traffic routes and collector roads for the most part service the internal collection and distribution of traffic in Torquay and Jan Juc, noting that Blackgate Road and Coombes Road also act to connect traffic to destinations east and west of the town.

Torquay Jan Juc are rather highly car dependent communities, not untypical of most places in Provincial Victoria that have only limited alternative transport options. Public transport services that currently operate consist entirely of buses and provide only a limited service and include:

- School bus service to transport students to secondary schools in and around Geelong;
- V/Line bus service that operates along the Surf Coast Highway and Great Ocean Road between Geelong and Apollo Bay; and
- Local bus service that operates between Geelong and Torquay and includes a one-way loops through the residential areas of Torquay and Jan Juc and a two way section incorporating the Torquay town centre, Bell Street activity centre and the Surf City tourist activity centre.

There are a limited number of pedestrian and cycle paths throughout Torquay and Jan Juc and this network is to be progressively improved through the implementation of the Shire's Pathways Strategy. Pedestrian access across Surf Coast Highway and Great Ocean Road during the summer period has improved with the installation of both intersection and pedestrian traffic lights at a number of locations. Crossing The Esplanade to access the beach is becoming more of an issue and would benefit from master planning the overall role, function and appearance of this important boulevard.

Plan 4.3: Existing Surf Coast Shire Road Hierarchy



The following is a summary of some of the key transportation issues affecting Torquay / Jan Juc:

- **Geelong Ring Road** - The '*Great Ocean Road Region Strategy*' (2004) flags that although Anglesea Road currently performs the role of a by-pass route around Torquay, the ultimate location of a connection of the Geelong Ring Road at Waurin Ponds will greatly influence traffic patterns. More particularly, the form of connection of the Ring Road to the Surf Coast Highway will greatly influence the traffic patterns of vehicles accessing the Ring Road from Torquay. Whatever the outcome, VicRoads anticipates that a further by-pass around Torquay will not be required as coast bound traffic will use Anglesea Road and reduce through traffic in Torquay.
- **Great Ocean Road** - The Surf Coast Highway between Torquay and Geelong has capacity to cater for projected traffic volumes within the Strategy period, however VicRoads advises that the stretch of Great Ocean Road between Spring Creek and Bellbrae will require widening in the long term, with priority given to the section east of Bells Boulevard.
- **Torquay Town Centre and local amenity** - The '*Jump Starting the Heart – Torquay Town Centre Revitalisation Project*' (2000) identified problems of traffic congestion around the Torquay Town Centre due to its location away from the Highway, and access via residential streets, primarily Bristol Road. It detailed strategies to improve traffic management within the centre. Further traffic management recommendations arose from the '*Traffic Engineering Assessment – Torquay Town Centre Proposed Planning Scheme Amendment C13*' (2004) which assessed traffic generation from rezoning of the former school site. One of the recommendations of this report called for the closure of the centre median opening in Surf Coast Highway opposite Bristol Road. A commitment to this closure was reaffirmed by Council in conjunction with the consideration of the development plan for "Torquay Central", and Council is continuing to advocate for this outcome with VicRoads.
- **Fluctuation of traffic volumes** – As with many coastal tourist towns, extreme traffic volume fluctuations can place short term pressure on street and car parking capacity. The difficulty is in managing these fluctuations without over designing for the relatively short periods of capacity.
- **Public transport** - The potential for establishing more effective public transport in Torquay and Jan Juc is limited by its small and dispersed population base compared to more urban centres such as Geelong and Melbourne. It is considered a priority however to introduce a more frequent and time efficient bus service between Torquay and Geelong, as well as within Torquay and Jan Juc. The improvement to the pathway network and an enhanced public transport service are critical elements in working toward reducing the number of car trips and achieving sustainability outcomes as referred to in Chapter 2.
- **Collector Street design** - Past subdivisions have been designed without adequate consideration of bus requirements, with the width of some roads insufficient to accommodate large buses. It will be important for potential bus routes to be incorporated into the design of future broad acre subdivisions.

Traffic Modelling

Methodology

Traffic Group were engaged to establish a road hierarchy in Torquay and Jan Juc that takes into account projected population growth and to identify future transport infrastructure improvements required to cater for this growth. This included developing proposals to enhance public transport as an integrated approach to traffic management.

Based on the development scenario and population projections detailed at the beginning of this section, Traffic Group prepared a traffic generation model that commenced with two 'base case' models that reflected:

- The peak (summer) traffic, based on the assumption that all of the existing lots are occupied; and
- The off-peak (winter) traffic, based on nominated occupancy rates that take into account the number of dwellings occupied as per the ABS Census data which is collected in the off peak period (August).

For each model it was assumed:

- A traffic generation rate of 10 trips per dwelling per day.
- Additional trips were assigned to account for beach traffic, both from caravan parks/tourist accommodation and from external sources.
- 45% of all trips would be to/from external destinations (including work, recreational and education related).
- The remaining internal trips to be distributed to 'activity centres', the proposed industrial area and the proposed activity centre and educational precinct in Torquay North.
- That the centre median opening in Surf Coast Highway opposite Bristol Road had been closed.

The existing traffic volumes as predicted by the models generally represent close to the existing traffic volumes observed from previous counts undertaken by Council.

The 'future traffic' model utilises the same road network and directional splits in relation to the 'base case' model but assumes greater numbers of dwellings. The ultimate development scenario is based on a 100% build-out of all lots, resulting in an estimated capacity population of 26,129 persons within 12,296 households (generally as per the estimated capacity projections provided at the commencement of this chapter). It is probable that the future traffic model may be an over-prediction of traffic volumes as a 100% build out is unlikely to ever be achieved and holiday occupancy traffic is unlikely to generate the number of trips as permanent occupants.

Issues

The future traffic modelling indicated an overall capacity for the road network to generally handle the future traffic volumes, but highlighted the following roads which are likely to experience a significant increase in traffic volumes:

- South Beach Road
- Horseshoe Bend Road
- The Esplanade
- Fischer Street
- Duffields Road
- Coombes Road
- Grossmans Road
- Darian Road
- Proposed Torquay North new connection to Surf Coast Highway.

In respect of these roads Traffic Group suggest a desirability of limiting traffic volumes to less than 3,000 vehicles per day during winter and less than 5,000 vehicles per day during summer to avoid negative residential amenity impacts.

Future Requirements / Recommendations

The capacity of the above roads to handle the expected traffic volumes can be addressed through road design, and in particular by minimising direct property access to these roads. Traffic Group has recommended the following measures to address road / network design and in addition has made recommendations to reduce the anticipated traffic volumes on a number of these key road links:

- ***Torquay North road network should include provision for an additional connection to the Surf Coast Highway, opposite Coombes Road. The spacing of arterial and collector roads is intended to provide convenient access for residents to these roads and to allow for the future operation of a public transport service along these routes to be within 400m access to all residents. An additional collector road at this point, with connection through to Highlander Street would lessen the future traffic volumes on South Beach Road, Horseshoe Bend Road, the proposed new east west collector in Torquay North and the Fischer Street extension. It could also reduce volumes on Grossmans Road by transferring some traffic to Coombes Road.***

This recommendation is supported. While Vic Roads is reluctant to approve additional access points / intersections connecting with the Surf Coast Highway, it is likely to consent to a new connection opposite Coombes Road provided the intersection is signalised.

- **Future Fischer Street alignment** north of Golden Beach Estate should follow a relatively straight north-south alignment extending through to South Beach Road to enable Fischer Street to perform the role of a collector route. This will ensure traffic is not diverted into lower order streets.

This recommendation is supported and should be immediately negotiated with the relevant developers.

- **Existing Fischer Street**, between Beach Road and Bristol Road will require widening to accommodate the increased traffic flows. Specifically, a 14.4 metre wide carriageway is recommended to provide for two through lanes and continuation of the bicycle lanes in each direction. Property acquisition would be required between Zeally Bay Road and Bristol Road to provide the wider road pavement through this section.

This recommendation is generally supported, though options to avoid land acquisition will be investigated. Termination of the bicycle lanes and street parking is an option, necessitating only a widening of the road pavement approaching the Bristol Road intersection to provide for separate left and right hand turning lanes.

- **Duffields Road** north of Great Ocean Road should retain its existing alignment and role as a through road, at least until such time as the alignment of a potential new through road is established further to the west. Frontages to Duffields Road will continue to be avoided in order to help preserve the vegetation within the road reserve.

This recommendation is supported. Recent detailed analysis of the connection of Beach Road with Duffields Road has indicated the need to site this connection further north than proposed in the Outline Development Plan, which supports retaining the existing alignment and role of Duffields Road. The Grossmans Road / Duffields Road intersection may need future upgrading to improve turning movements.

- **The Esplanade**, south-west of Horseshoe Bend Road is anticipated to ultimately carry over 12,000 vehicles per day in peak times and should be widened as necessary to a consistent width of about 13.6m to provide two through lanes, kerbside parallel parking that does not obstruct through traffic, and on-road cycle lanes (as proposed in the Pathway Strategy).

This recommendation is supported. Design work has commenced on the widening of The Esplanade between Horseshoe Bend Road and Darian Road.

- **Torquay Town Centre access** arrangements in terms of the closure of the highway median strip opposite Bristol Road should be revisited due to the traffic volume implications of this closure on residential amenity in Zeally Bay Road and Anderson Street. In the medium to long term, as Bristol Road develops with commercial uses, fewer residences will be impacted than in the other two streets. A redistribution of a proportion of the traffic back into Bristol Road would ameliorate the traffic impacts on Zeally Bay Road and Anderson Street.

This recommendation is not supported for the foreseeable future. Council will continue to pursue the closure of the median opening at the appropriate time. Nevertheless, there may be merit in reviewing the traffic distribution in the medium to long term as the Town Centre develops and Bristol Road takes on a greater commercial function with the development of the former school site and the north side of Bristol Road opposite the school site.

- **The Activity Centre strategy** of concentrating commercial development in the town centre has the consequence of concentrating vehicle trips to this centre. Traffix Group suggests this could be addressed through adopting a more dispersed retail strategy.

This approach is counter to Council's long held strategy and is not supported in the most recent Retail Strategy Review (2005). Nevertheless, the Strategy provides clear direction that will provide medium to long term options for the Torquay Jan Juc residents. The establishment of a small neighbourhood centre in Torquay North will assist in providing the daily needs of the Torquay North community and make a modest reduction in the requirement for these residents to visit the town centre. The establishment of a standalone centre (including a supermarket) is considered unviable by Essential Economics, having consideration to the proximity of the Town Centre and the self-contained nature of the catchment. There is some scope to consider a small

increase in size of this proposed neighbourhood centre up to 1,000sqm to allow a wider mix of specialties to locate, without compromising commercial viability and the integrity of the retail hierarchy. In the longer term, Essential Economics have recommended the planning for a new centre in Torquay West as population growth demands and the Torquay Town Centre nears full development. This will ultimately provide a second main retail focus to help disperse traffic volumes.

- ***Surf Coast Highway intersection treatments*** will be necessitated through increased cross movements associated with the town centre, municipal and education precincts and general residential development. A more detailed investigation of the major highway intersections highlights the requirement for signalisation of five intersections (South Beach Rd, Proposed Torquay North Access, Combes Rd, Beach Rd and Zeally Bay Rd. Intersection layout design is provided for each of the major intersections.

This recommendation is supported, notwithstanding Council's longstanding preference for roundabouts, signalisation is acknowledged as being able to provide more controlled traffic management.

Public Transport

Key public transport improvements include providing a better bus connection to Geelong and providing a more comprehensive service around Torquay and Jan Juc. The Geelong connection should be based from a central bus port adjacent to the Surf Coast Highway which provides off-street bus bays, enclosed waiting facilities and parking areas. This should be the first and last point of call for buses arriving from and departing to Geelong, and the inter-town bus timetable should be scheduled around this service. The Geelong buses should be timetabled to connect with the train service, initially at South Geelong and Geelong City Railway Stations, and more importantly with Marshall Railway Station with encouragement being given to increasing the frequency of train services at this station.

Future development in Torquay / Jan Juc needs to be designed to accommodate buses, including suitable road widths and connective road networks, and concentration of community infrastructure in nodes.

Bicycle and Pedestrian Network

The Surf Coast Pathway Strategy proposes a network of on-road cycle lanes, regional and local shared paths and footpaths throughout Torquay and Jan Juc that will provide a significant improvement on the existing facilities and should meet the needs of the future population.

The Pathway Strategy identifies Horseshoe Bend Road as a potential regional on-road cycle route linking Torquay with the Geelong Armstrong Creek growth corridor. The gradient of this existing road is ideal for cycling, and consideration should be given to investigating the provision of a segregated cycle route along this road. This could involve discouraging non-essential car usage between Blackgate Road and Lower Duneed Road.

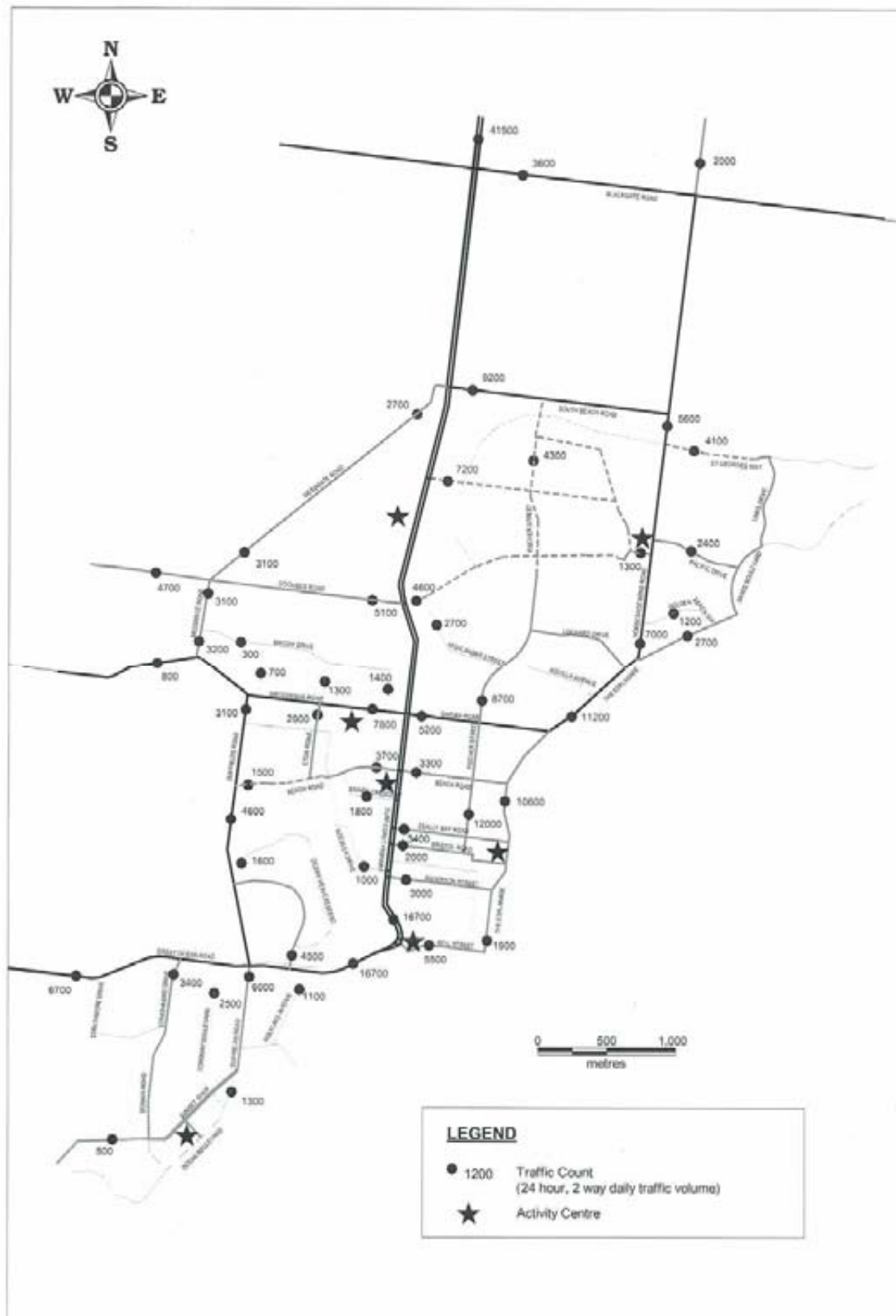
Revised Modelling

Based on the above, Traffix Group prepared a revised traffic model that incorporated their recommendations. This model was also modified to incorporate other variations that had come to light. More particularly the model was based on the following modifications:

- Additional link to Surf Coast Highway opposite Coombes Rd.
- Straightened alignment of Fischer Street through to South Beach Road.
- Increased capacity of Fischer Street and The Esplanade through widening at nominated points.
- Allowance for traffic travelling north of Blackgate Road along Horseshoe Bend Road.
- Improved public transport, in terms of both routes and frequency, resulting in an overall assumed reduction of vehicle movements per dwelling per day from 10 to 9 vehicle movements.

The peak (summer) projected traffic volumes are depicted in Plan 4.4 below.

Plan 4.4: Traffic Model – Proposed Development Scenario (Summer Volumes)



Traffic Infrastructure Recommendations

Table 4.14 summarises the recommendations of the Traffic analysis, including priority of the works and an approximate timing of works linked to trigger points in population growth.

Table 4.14: Traffic Network Recommendations

Location	Measure	Priority	Trigger Point
Highlander Street	Extend Highlander Street to intersect with Surf Coast Highway at Coombes Road.	Medium	As land is developed in Torquay North
Fischer Street	Ensure the northern extension of Fischer Street follows a relatively straight north-south alignment to South Beach Road without T-intersections.	High	As land is developed in Torquay North
Fischer Street	Widen Fischer Street to at least 14.4m between Beach Road and Bristol Road including property acquisition between Zeally Bay Road and Bristol Road.	Medium	When off-peak (winter) daily traffic volumes exceed 3,000vpd
Fischer Street Extension	Continue the existing 10.35m wide carriageway and provide a single through lane and parking lane and either on-road cycle lanes (1.5m wide each and separate from parking lanes) or a shared path on one side.		Configuration at time of development
Duffields Road north of Great Ocean Road	Maintain as a collector role until such time that an additional north-south link further to the west is constructed.	High	Ongoing (no works required)
Intersection of Duffields Road/Beach Road	Construct intersection at a point along Duffields Road such that sight distance is maximised with priority to Duffields Road.	High	As land is developed in Torquay West
Surf Coast Highway Intersections	Refer to Transport Infrastructure Strategy Review, Chapter 6.		
Beach Road and Eton Road extensions	Where direct property access is proposed, kerbside parking lanes and a single through lane in each direction.		Configuration at time of development
Torquay North, new east-west collector route	Could be constructed as either a divided (i.e. "Boulevard" style) road or a single carriageway, but should contain a single through lane and kerbside parking lane in each direction, with provision either for on-road cycle lanes or a shared path on one side.		Configuration at time of development
Horseshoe Bend Road (western side opposite Pacific Drive development)	Widen to accommodate a 2.4m parking land and kerb and channel, as well as a 1.5m wide footpath, extending from the existing path to the south.		As abutting land is developed

Location	Measure	Priority	Trigger Point
South Beach Road	Configure similar to Horseshoe Bend Road with a 2m shared path on the south side within the nature strip and a 9.4m carriageway accommodating a 3.5m through lane in each direction and a 2.4m parking lane on the south side. Local widening should also occur to provide for through and turning movements at any intersections along this road.	High	As abutting land is developed (widening to occur on south side)
Darian Road	Investigate a need for parking bans (or peak hour clearway restrictions).	Medium	When off-peak (winter) daily traffic volumes exceed 3,000vpd
The Esplanade	Widen northern sections to ensure that a through lane in each direction (clear of any parking lanes) is maintained (note requirement to provide on-road cycle lanes in accordance with Pathway Strategy).	High	Could be undertaken in sections as Torquay North is developed, when off-peak (winter) daily traffic volumes exceed 3,000vpd for each section
The Esplanade – north-east section	Amend planning scheme maps to indicate The Esplanade as a road reservation (not foreshore land)	Low	Short term
Coombes Road	Widen to 7.0m carriageway and limit direct vehicle access to adjacent future residential development	Medium	When adjoining land is developed or when Geelong Bypass is complete, whichever comes first
The Esplanade/Darian Rd intersection	Upgrade to a roundabout or similar treatment	High	As land is developed in Torquay North
South Beach Rd/ Fischer St intersection	Upgrade to a roundabout or similar treatment	High	As Fischer Street alignment to South Beach Road is completed
Coombes Rd/Messmate Rd intersection	Upgrade to a large radius roundabout	Low	Medium term (after Geelong Bypass is completed)
Fischer St/Highlander St intersection	Upgrade to a roundabout or similar treatment	Medium	When Highlander Street to Surf Coast Highway link is constructed
Road Hierarchy	Advise Melway Publishing of its adopted road hierarchy	Low	Ongoing
Horseshoe Bend Ro / South Beach Rd	Upgrade to a roundabout or similar	Low	As land is developed in Torquay North
Grossmans Rd / Duffields Rd	Upgrade intersection to incorporate turning lanes	Medium	As land is developed in Torquay West

Stormwater Drainage

In accordance with the principles of Urban Sensitive Stormwater Design, the stormwater run-off from new broad acre residential subdivisions will be detained on-site within collection ponds, obviating the need for capacity upgrades of existing stormwater pipes.

Stream quality will be protected through Water Sensitive Urban Design principles. Where new subdivision interfaces with streams, stormwater quality will be enhanced to current best practice through use of wetlands or other means. Older areas of Torquay have benefited from retrofitting of gross pollutant traps, but still present ongoing problems in delivering uncontrolled, untreated stormwater into sensitive natural systems. Solutions to this are not necessarily easy or affordable, and are not isolated to Torquay / Jan Juc. Nevertheless an on-going program of retrofitting stormwater quality facilities to existing stormwater systems needs to be pursued.



5 Key Objectives and Strategic Responses

SETTLEMENT – PLANNING, DESIGN & BUILT FORM

Objective

To accommodate the population growth of the Surf Coast Shire within Torquay / Jan Juc as one of two main urban growth centres in the Shire.

To create a planned township that makes efficient use of land in providing opportunities for residential growth and economic development, with well connected neighbourhoods.

To maintain and enhance the distinct and unique surfing identity and coastal character of Torquay / Jan Juc.

To achieve a diversity of housing types responsive of the needs of the community in styles that reflect the coastal image and character of the town and its natural environment, and which promote energy and resource efficiency as a legacy of coastal living.

To promote subdivision designs which encourage walking, reduce car dependence and focus on community and shared spaces.

Strategic Responses

Strategic Growth Principles

- Torquay will accommodate residential growth over the next twenty years within the existing settlement boundaries through:
 - Encouraging urban consolidation within the established central Torquay area, particularly close to the town centre.
 - Planning residential growth in two corridors, to the north to South Beach Road, and to the west to Duffields Road; and at the appropriate time, west of Duffields Road.

Urban development of land west of Duffields Road, within the Spring Creek Valley, will be subject to the preparation of a Growth Area Framework Plan and subsequent more detailed Precinct Structure Plans. The Framework Plan will be the subject of inclusive and creative processes to ensure the creation of a plan that is owned by the community and is visionary in achieving ecologically sustainable development. The Plan will have regard to the Spring Creek Catchment Plan (2003), as appropriate. The Framework Plan will establish a settlement boundary for this western growth corridor. In the interim the Spring Creek Valley will be retained in rural use to preserve its potential for urban development.

- Residential rezoning will occur in a coordinated and orderly sequence, having regard to the efficient provision of servicing and transport infrastructure.
- The Torquay / Jan Juc Structure Plan (Plan 5.1) reaffirms the existing designated settlement boundaries of Torquay / Jan Juc. The settlement boundary on the northern ridgeline establishes a

visual separation of Torquay from the rural approach through the Thompson Creek valley and from the southern urban extension of Geelong. This clear delineation between urban and rural afforded by the ridgeline is to be preserved.

- Industrial growth will be promoted to occur in a new estate located south of Grasstree Park, with long term growth opportunities being preserved to the west and north-west across Messmate Road.
- Retail development will be largely concentrated in the Torquay Town Centre with provision for small neighbourhood centres in designated nodes. Tourism related retailing has a primary focus on the Surf Coast Highway and the Surf City complex, with secondary nodes at The Esplanade (east end of the Torquay Town Centre) and at Bell Street.
- Limited opportunities for low density residential development will be maintained on the edges of the town and will not be allowed to sprawl beyond the settlement boundaries. These low density residential areas serve to protect areas of remnant vegetation and provide a zone of urban / rural transition to the north and south-west. A minimum lot sizes of 1.5ha is to be retained in the Bells Boulevard area to protect vegetation and landscape values. Resubdivision of land holdings into minimum 1ha lots may be considered in the Torquay Heights estate only following the installation of a reticulated water supply. Connection of low density residential estates to the reticulated sewerage system will be encouraged where feasible to remove potential environmental issues arising from on-site treatment and containment.

Residential Design and Density

- The average gross residential density in the new estates of Torquay has been around 10 lots per hectare. Future residential estates will be encouraged to achieve a higher density, together with a range of lot sizes to encourage the provision of a diversity of dwellings. Melbourne 2030 suggests an aim of around 15 dwellings per hectare within structure plan areas. For Torquay this will be guided by township character policies.

Densities should vary throughout an estate, but for reasons of access and efficiency higher densities will generally be concentrated around activity centres, community infrastructure hubs and active public open space. The higher density nodes will assist in achieving the overall higher density outcome.

The boundaries of these higher residential density areas are notional and are intended as a guide, but might typically be within 400 metres of activity centres or community hubs.

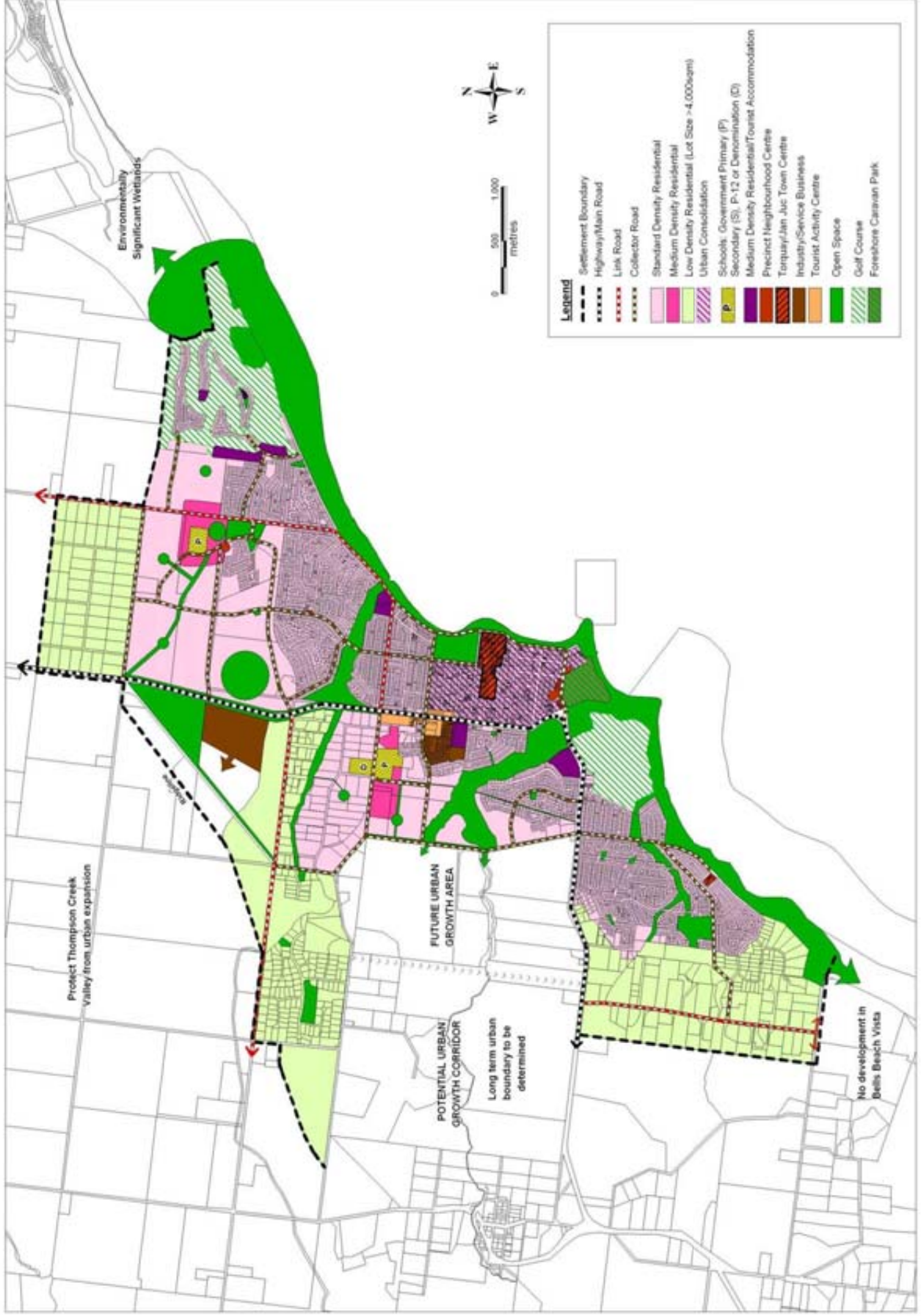
- Redevelopment of the old part of Torquay, particularly around the Town Centre, will be encouraged to achieve an overall increase in development density and increased opportunity to live in close proximity to community and retail facilities. Nevertheless, development must value add to the character of the 'old Torquay' neighbourhood, and be respectful of the urban form and heritage values of adjacent sites.
- The coastal township character of Torquay / Jan Juc is an important design element for new and infill residential development. Residential design and densities shall have regard to the protection and establishment of vegetation to soften and screen development, maintaining low profile building heights and simple built forms / coastal designs that utilise lightweight materials, recessed garages and minimalist front fencing. Particular regard will be had to prominent locations within the township (major boulevards and thoroughfares) including areas highly exposed to the foreshore to ensure development respects the landscape values of these areas.
- Innovative medium density housing solutions will be encouraged around activity centres and open space. Coastal and landscape themes should feature strongly in these nodes. These developments can add diversity and interest to residential areas and should feature a range of dwelling types. Incentives are to be considered for delivery of smaller dwellings the meet the needs of smaller households.
- Community focussed settlement and subdivision design is encouraged to foster a strong sense of community, emphasising pedestrian dominated and resource conservation design and construction.

- Retirement villages should be of a scale commensurate with their neighbourhood and shall be designed to integrate with the surrounding road network to facilitate connectivity through the site and to associate with the local community.
- The overlay control applying to the visually sensitive area of south Jan Juc forming part of the Bells Beach Surfing Recreation Reserve landscape viewshed requires review to ensure its effectiveness and relevance in protecting the cultural heritage experience of visiting this iconic reserve.
- Low density residential development sited on the perimeter of the Torquay Jan Juc towns serves to reinforce the urban town boundary to the north, north-west and south-west. The provision of low density residential development is not anticipated to meet all demand, but offers an additional form or choice of residential living / housing in close proximity to urban services and facilities.

Environmental Sustainability

- Community buildings in Torquay should play an educative role in sustainable design techniques. They should showcase energy efficient technology.
- Subdivision design should ensure that local streets are aligned east-west and north-south wherever possible. North-south streets should be within 20 degrees west and 30 degrees east of true north. East west streets should be within 30 degrees south and 20 degrees north of true east. Where streets are within the acceptable orientation range, rectangular shaped lots are appropriate.
- Subdivision design should facilitate greenhouse gas reduction targets set by the Shire as part of the Cities for Climate Protection Program, including design for accessibility and walkability, incorporation of low emission street lighting etc.
- Methods will be explored to encourage new residential dwellings and renovations / additions to dwellings to achieve environmentally sustainable design and achieve a higher bench mark than the 5 star energy rating. Initiatives include:
 - Energy efficient and solar passive design
 - Effective use of insulation, double glazing and thermal mass
 - Solar hot water/electricity
 - Water efficient appliances, rainwater capture and reuse
 - Innovative greywater and blackwater treatment systems and reuse for non-potable purposes
 - Use of sustainable building materials.

Map 5.1 Torquay Jan Juc Structure Plan



ENVIRONMENT

Objective

To protect and enhance significant environmental and cultural features which contribute to the ecological values, coastal character and residential amenity of Torquay and Jan Juc.

To encourage and facilitate development that is environmentally sustainable and makes best use of limited land available for future development.

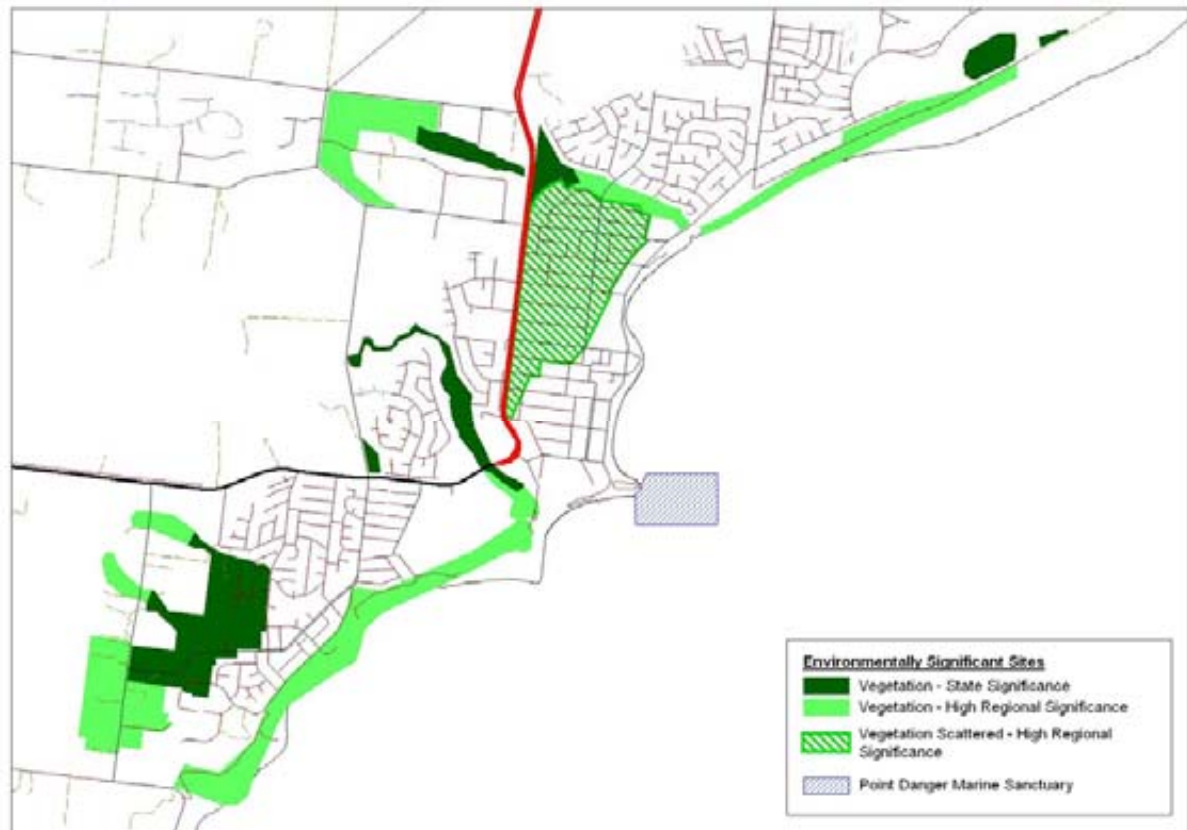
Strategic Responses

Native Vegetation and Habitat Management

- There remain few remnant patches of the original native vegetation that once inhabited what is now the established areas and designated growth areas of Torquay and Jan Juc. Hence what remains is of great value to the coastal character and cultural heritage of the town and should be protected. Protection of remnant vegetation will be best achieved by including as much as possible in the open space network. Not unexpectedly, much of the remnant vegetation of State significance is found along the creek reserves (Spring and Deep Creeks) and along the foreshore. Much of the balance is in the low density residential areas and these will continue to be the appropriate land use to assist in maintaining this remnant vegetation. The open space network shall, wherever possible, integrate and connect these areas of natural value and habitat, including creeks and areas of remnant vegetation.
- Creeks shall be protected through the establishment of open space reserves having a minimum width of 30 metres measured from the centre of the creek. Wider reserves will be required if necessary to appropriately accommodate pathways, landscaping / revegetation, erosion control, stormwater treatment and/or habitat protection / enhancement.
- Where remnant vegetation falls outside the designated open space network, it should be preserved through the use of tree reservations, pocket parks, widened nature strips, or larger residential lots with appropriate building envelopes. The removal of native vegetation should only occur as a last resort.
- Plan 5.2 identifies the State and Regionally significant environmental sites. Where a significant site falls outside the open space network, any development of these areas will need to be extremely sympathetic to the underlying environmental values. The retention of indigenous vegetation in these areas is a high priority. Development must be designed not only to protect but to maintain and enhance the indigenous vegetation. Stormwater treatment should be given high priority for the systems that directly impact on the Point Danger Marine Sanctuary.
- All decisions relating to the protection and clearance of native vegetation must contribute to the 'net gain' goals contained in 'Victoria's Native Vegetation Management – A Framework for Action'. To achieve 'net-gain' outcomes in Torquay, it is required that Development Plans include:
 - An appropriate assessment of any potential impacts on native vegetation and management options that avoid clearing.
 - Consideration of clearing in the context of sustainable land use change.
 - A comprehensive explanation of how any losses associated with clearing is mitigated by commensurate gains through appropriate off-sets.

Development Plans must follow a three step approach to native vegetation management and Net Gain:

- To avoid adverse impacts, particularly through vegetation clearance.
- If impacts cannot be avoided, to minimise impacts through appropriate consideration in planning processes and expert input to project design or management.
- Identify appropriate off-set options.

Plan 5.2: Sites of State and High Regional Environmental Significance**Aboriginal Archaeological Sites**

- Detailed archaeological assessments are to be prepared to support land rezoning requests or development applications involving large scale residential or other development on broadhectare sites or large redevelopment sites in acknowledgement of the pre-European habitation of this coastal area.
- Significant aboriginal heritage sites should be protected from development in open space or reserves where practicable. The management of heritage sites and the expression of aboriginal culture in Torquay and Jan Juc should occur in full consultation with the Wathaurong Co-operative.

Heritage Buildings and Structures

- Possible heritage places identified in the Surf Coast Heritage Study shall be further investigated to determine whether they should be protected by the Heritage Overlay in the Surf Coast Planning Scheme.
- Heritage places should be used to reinforce local character and maintain a connection with the rural history of the locality.

ECONOMIC DEVELOPMENT

Activity Centres

Objective

Maximise local employment growth associated with retail activity generated by residents and tourists.

Promote sustainable / attractive activity centres that re-enforce the surfing, beach and coastal image of Torquay, and are accessible to residents.

Strategic Responses

Activity Centre Hierarchy

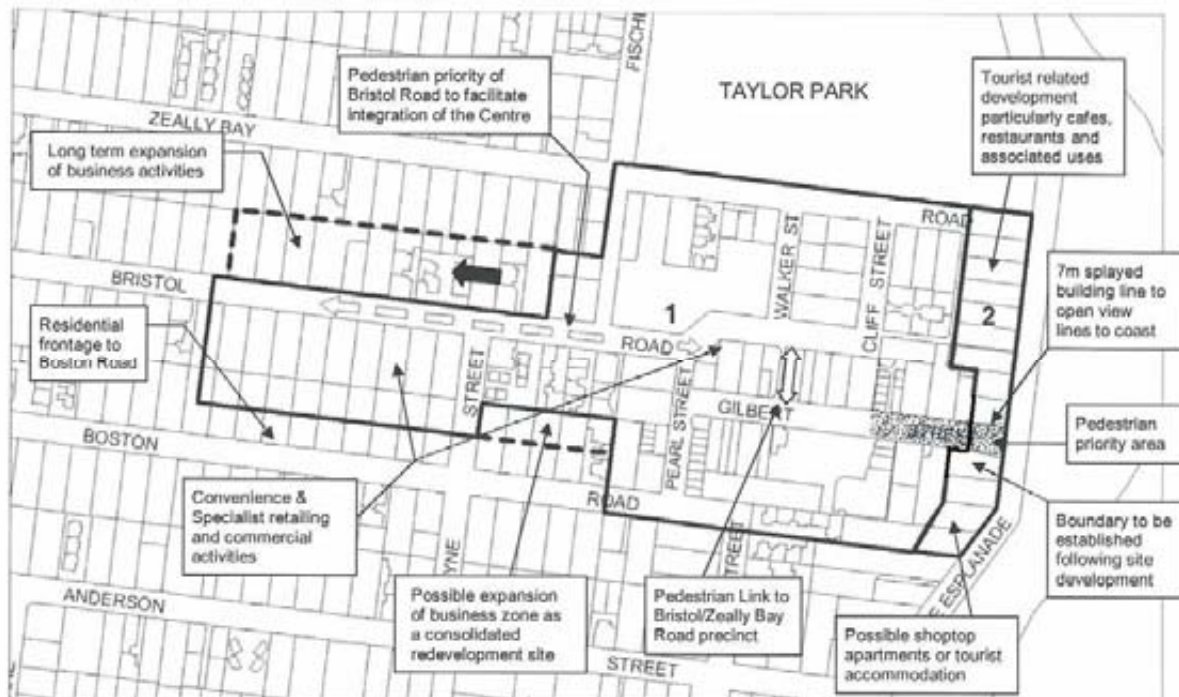
- Torquay and Jan Juc will be supported by a three tiered hierarchy of activity centres within the towns comprising:
 - Torquay Town Centre
 - Tourist retailing precincts
 - Small neighbourhood centres.

The distribution of these centres are shown on Plan 5.1 (Torquay Jan Juc Structure Plan).

Torquay Town Centre

- The role of the Torquay Town Centre (depicted in Plan 5.3) as the main retail centre serving the resident population with their basic day to day and weekly retail needs will be consolidated and strengthened by:
 - Focussing new convenience related retail and office development in the Centre.
 - Promoting long term expansion of the existing two major supermarkets to an ultimate size of approximately 3,500m² each.
 - Promoting the establishment of a non food based retail 'anchor' development, together with specialist retailing, on the former Torquay Primary School site generally in accordance with the approved 'Torquay Central Development Plan'.
 - Encouraging tourist oriented uses including tourist related retailing, cafes, restaurants, alfresco dining and associated tourist accommodation along The Esplanade adjacent to the foreshore, spilling around from Gilbert Street.
 - Increasing the flexibility for retail uses to establish along Zeally Bay Road and the eastern end of Gilbert Street. The Comprehensive Development Zone – Schedule 1 applying to this part of the Town Centre should be reviewed with the view of rezoning the effected land to Business 1 and extending the Business 1 zone over the eastern end of Gilbert Street, (refer Plan 5.3).
 - Supporting the rezoning of land on the north side of Bristol Road as far as necessary to establish a clear linkage between the former school site and the existing centre, but not further west than retail development opposite, (refer Plan 5.3). Discretionary non-residential land uses in this strip of Residential 1 Zone will be encouraged to establish in the interim to its rezoning.
 - Encouraging the rezoning of the rear half of the lots fronting Boston Road between Pearl and Payne Streets for commercial development to facilitate increased integration of the Gilbert Street end of the town centre with the former school site end (refer Plan 5.3). This rezoning should be subject to achieving an integrated redevelopment of this block to maximise the benefits.
 - Avoiding the establishment of unplanned free standing retail centres in Torquay and Jan Juc.

Plan 5.3: Torquay Town Centre Precincts



- By 2020, the Torquay Town Centre is expected to have the following characteristics:
 - A combined retail floor area of approximately 18,000sqm.
 - Convenience related retail uses in TTC Precinct 1, including at least two major supermarkets and a non-food based 'anchor' development on the former school site with specialist retailing and other commercial uses.
 - Tourist related retail uses including cafes and restaurants located at the eastern end fronting onto The Esplanade (TTC Precinct 2) providing a strong interface between tourist use of the foreshore and shopping areas.
 - A mix of offices and apartments / tourist accommodation located above shops, adding vibrancy to the Centre.
 - Gilbert Street developed as a pedestrian priority thoroughfare, with reduced traffic and widened footpaths to encourage street activity, including on-street dining, particularly on the southern side.
 - Streetscape and building design that reinforces an image built upon the 'beach and surfing character' of the town.
 - Building height limited to 2-3 storey to retain the coastal town scale and to respect the low scale form and height limit of surrounding residential development.
 - Views of the foreshore from Gilbert Street maximised through enabling design and siting of buildings at the eastern end and complementary streetscape design.
 - Visual and access links with Taylors Park, making maximum benefit of the northern orientation of the views across Zeally Bay Road into the park.
 - Integration of the east and west ends of the town centre through sensitive design of Bristol Road and the creation of a pedestrian mall between Payne Street and Pearl Street linking Gilbert Street with the Torquay Central town square/plaza.
 - Bristol Road developing as a strip centre, promoting an active, pedestrian friendly streetscape with widened footpaths, landscaping and innovative street furniture.

- Car parking located in large public areas generally around the perimeters of the centre to maximise shared use of spaces and encourage traffic to circulate the perimeter of the town centre.
- Car parking provided on private land in strategic locations in accordance with the '*Torquay Town Centre Car Parking Strategy 2020*' (2006). Cash-in-lieu contributions used by Council to fund the provision of public parking spaces.
- Taxi, bus and bicycle parking located to maximise integration with retail uses.

Tourist Precincts

- Tourist related commercial development including retail floor space and accommodation will be encouraged to locate in the tourist precincts within the Special Use Zone – Schedule 5 at The Esplanade, and along the Surf Coast Highway (including Surf City). Convenience shopping and core business activities will continue to be discouraged from establishing in these precincts.
- The commercial strip along Bell Street will continue to develop its role as an entertainment and tourist precinct, with a mix of restaurants, bars and shops, while also serving the convenience shopping needs of the local community and of campers in the adjacent foreshore caravan park.
- Commercial uses such as restaurants will be discouraged from establishing in the residential zone along The Esplanade and Bell Street to reinforce the commercial tourist roles of the Torquay Town Centre and Bell Street activity centre and to maintain the residential amenity and streetscape of the residential promenades.

Neighbourhood Centres

- The Jan Juc centre will continue to have a role as a small neighbourhood centre. The visual appearance of the centre has received attention in recent years and this will continue to evolve.
- A small neighbourhood activity centre of approximately 500sqm to 1,000sqm will be established in Torquay North to serve residents of the Torquay North growth corridor with basic convenience needs. The centre will be located in a prominent corner position on a collector or higher order road, preferably adjacent to community and recreation facilities.

“Bulky Goods” Retail

- Large format bulky goods that seeks Surf Coast Highway frontage will be discouraged due to the potential impact of such development on the visual amenity of the Highway and the town's surfing identity.
- 'Secondary' (ie smaller scale / specialist) bulky goods retail floor space that does not require Highway frontage will be encouraged to locate at Baines Court/Crescent within the Industrial 3 Zone.

Long Term Convenience Related Retail Growth

- Long term demand for convenience related retail floor space, beyond that planned for the Town Centre, may be accommodated through the establishment of a new precinct activity centre in the Torquay West growth corridor west of Duffields Road. This centre should be planned for at an early stage as part of the investigation into growth in this corridor, but should not be constructed until circumstances require, including build out of the town centre or rising traffic issues associated with the town centre.

Industry

Objective

Maximise local employment growth associated with industrial development that is complementary to Torquay's coastal lifestyle image, both in terms of use and appearance.

Strategic Responses

- Industrial and other non-retail commercial uses will be encouraged to establish in a new estate north-west of Torquay as shown on Plan 5.1 (Torquay Jan Juc Structure Plan). Heavy or offensive types of industry that produce off-site environmental or amenity impacts will be discouraged.
- Industrial uses in the existing estate at Baines Crescent and Beach Road, particularly motor mechanics, panel beaters and garden supplies will be encouraged to relocate to the new estate north-west of Torquay, providing opportunities for their replacement with uses that produce less off-site amenity impacts.
- Longer term expansion options of the Torquay North-West industrial estate will be preserved to the west, and across Messmate Road, up to the ridge line forming the northern boundary of Torquay.
- Development of the industrial estate will be guided by the Development Plan to be approved under the DPO3 applying to the site which stipulates important environmental outcomes, including an environmental buffer to the adjoining Grass Tree Park conservation reserve, the establishment of biolinks and the visual treatment of the Surf Coast Highway frontage. Industrial development design guidelines provided in the Industrial Development Policy (clause 22.04) should be reviewed and expressed in an appropriate overlay.

Tourism

Objective

Encourage tourist activities and facilities that will grow the local tourist industry while marrying with the Torquay Jan Juc lifestyle and promoting / showcasing the community's values.

Strategic Responses

- The surfing industry is a core business and life style of Torquay. The Surf City Tourist Precinct (Special Use Zone 5) on the Surf Coast Highway is a primary destination for many tourists and others visiting Torquay. It is paramount that development in the Tourist precinct contributes to and builds on the surfing image of the town and that development on visually prominent sites are of a special quality using colours, material, vegetation and architectural features that contribute to making an outstanding landmark statement and lasting impression. These developments should also showcase environmentally sustainable design to lead in implementing the values of the community.
- The provision of a range of tourist accommodation is important in encouraging longer stays. In addition to the provision of tourist accommodation as part of a mix of tourist oriented uses in the Tourist precincts, the Structure Plan nominates a number of other strategically placed sites where tourist accommodation and appropriate associated uses would be promoted. Developments in these localities may be of higher densities but shall integrate with the surrounding residential scale. Similarly the two golf courses are encouraged to take up opportunities to complement their existing recreational facilities through the provision of tourist accommodation and associated activities in keeping with the ambience and amenity of their locations.

INFRASTRUCTURE

The Transportation System

Objective

To build on the existing transportation system in a manner that reduces car dependence, encourages walking and cycling for local trips, manages the summer tourist/holiday peaks and respects the coastal character of the towns.

Strategic Responses

Road Network

- The Strategy Plan area will be serviced by an integrated road network comprising:
 - Vic Roads (Highways / Main Roads)
 - Link Roads
 - Collector Streets
 - Access Streets
- Plan 5.4 shows the proposed road hierarchy of primary, secondary and sub arterial roads – a description of each road type is given in Table 5.1.
- The local street system will be designed as part of the Development Plan process. The streets should have the following characteristics:
 - Connect residential precincts and activity centres.
 - Be based on a modified grid layout that is responsive to landform.
 - Allow development to front streets and open space.
 - Not attract large volumes of traffic destined for arterial roads.
 - Offer multiple routes to internal destinations in order to evenly distribute traffic and provide better environments for cyclists and pedestrians.
 - Incorporate WSUD treatments.

Streetscape Themes

- All roads should be designed to make a positive contribution to the urban landscape and the coastal character of Torquay and Jan Juc. The link and collector roads in Torquay should present as parkways / avenues that link key destinations. Road reservations should accommodate mature canopy trees and plantings should extend into adjoining developments.
- Higher order roads should be designed to provide for off-road cycle paths as a preferred treatment.
- Local streets should have landscaping themes that are appropriate to the prevailing site conditions. For example, planting of indigenous trees near environmentally sensitive areas. Local streets should appear to be an extension of the open space system, and be designed to encourage pedestrian use and social interaction that actively encourages vehicles to slow down.
- Existing trees should be protected in road reserves where possible.
- Streetscapes should be designed to meet stormwater management requirements as well as vehicular and pedestrian needs. This may involve the use of roads reserves for stormwater storage or diversion, and landscaping that compliments WSUD principles.
- The Esplanade is a key feature of Torquay being the link or transition between the town and the foreshore. Its appearance and functionality impact on the majority of people that live in or visit the town. This transport corridor warrants the development of a Master Plan incorporating urban design, landscaping and traffic engineering treatments that reinforce and respond to its role and its

function of providing access to the foreshore and being the visual link between the town and the coast.

Plan 5.4 Torquay Jan Juc Road Hierarchy

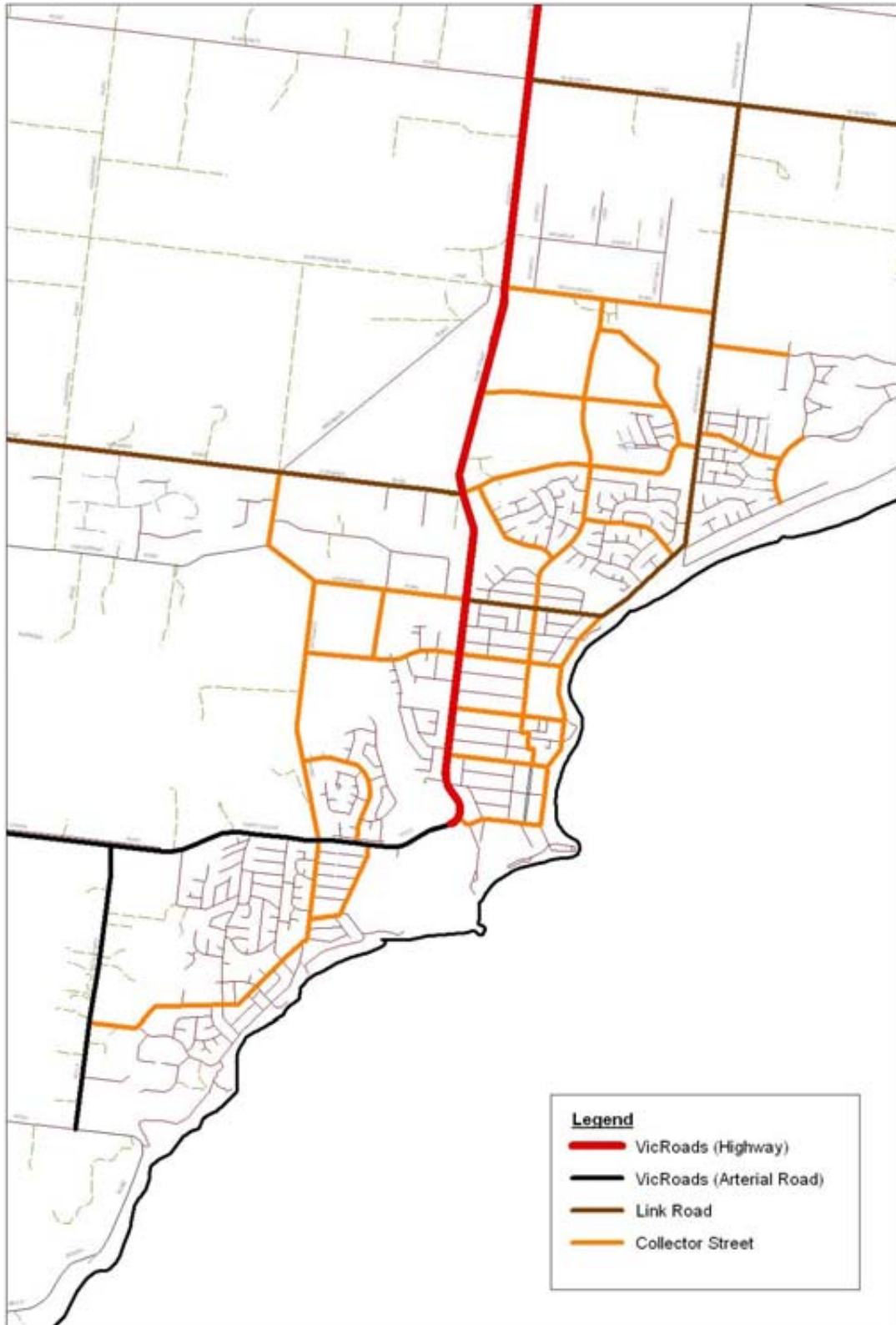


Table 5.1 – General Description of Road Types Proposed for Torquay / Jan Juc

Road Type (SCShire Hierarchy)	Function	Target Speed Max (km/h)	Indicate Ultimate VPD	Reservation	Ultimate Road Geometry	Cycle Lanes
PRIMARY ARTERIAL ROAD (VIC ROADS – Highway & Arterial Road)	Form regional grid of traffic routes. To be fronted by service roads.	60 - 80		40m	1 X 10.0m carriageway 1 x 8.5m carriageway	Dedicated off pavement Dedicated off pavement
SURF COAST HWY (South of South Beach Rd)						
GREAT OCEAN RD (East of Bells Boulevard)						
SECONDARY ARTERIAL ROAD (LINK ROAD)	Single lane in each direction with off pavement bike lanes (other than on rural roads). Limited direct vehicle access.	100		20m	1 x 6.4m carriageway	On-pavement shared with vehicles.
BLACKGATE ROAD						
HORSESHOE BEND ROAD	North of South Beach Rd to Blackgate Road Sth Beach Rd to Golden Beach Estate Golden Beach Estate frontage	80		20m	1 x 6.2m carriageway	On-pavement shared with vehicles.
North of South Beach Rd to Blackgate Road						
Sth Beach Rd to Golden Beach Estate						
Golden Beach Estate frontage						
THE ESPLANADE (btwn Horseshoe Bend Rd & Darian Rd)	Single lane in each direction with off pavement bike lanes (other than on rural roads). Limited direct vehicle access.	60		20m	1 x 9.4m carriageway (with 2.4m indented parking lane east of Deep Creek)	On-pavement with widened kerbside.
DARIAN ROAD						
COOMBES ROAD						
		60		20m	1 x 11.4m carriageway	On-pavement with widened kerbside.
		80 - 100		20m	1 x 7.0m carriageway	On-pavement shared with vehicles.

Road Type (SCShire Hierarchy)	Function	Target Speed Max (km/h)	Indicate Ultimate VPD	Reservation	Ultimate Road Geometry	Cycle Lanes
SUB ARTERIAL ROADS COLLECTOR ROADS (COLLECTOR STREET)	Predominantly residential frontage. Provide major connections between neighbourhoods and activity centres. Typically 2-lane undivided with widened kerbside for cyclists.	60-80	>5,000	20m	1 x 10.5m carriageway	On-pavement with widened kerbside
		60	<5,000	20m	1 x 8.0m carriageway	On-pavement with widened kerbside
LOCAL STREETS (ACCESS 1 & 2)	Local environment is dominant. High amenity streetscapes should promote pedestrian and social activity. Safe for cyclists.	50	3,000	16m	1 x 7-7.5m carriageway	On-pavement shared with vehicles

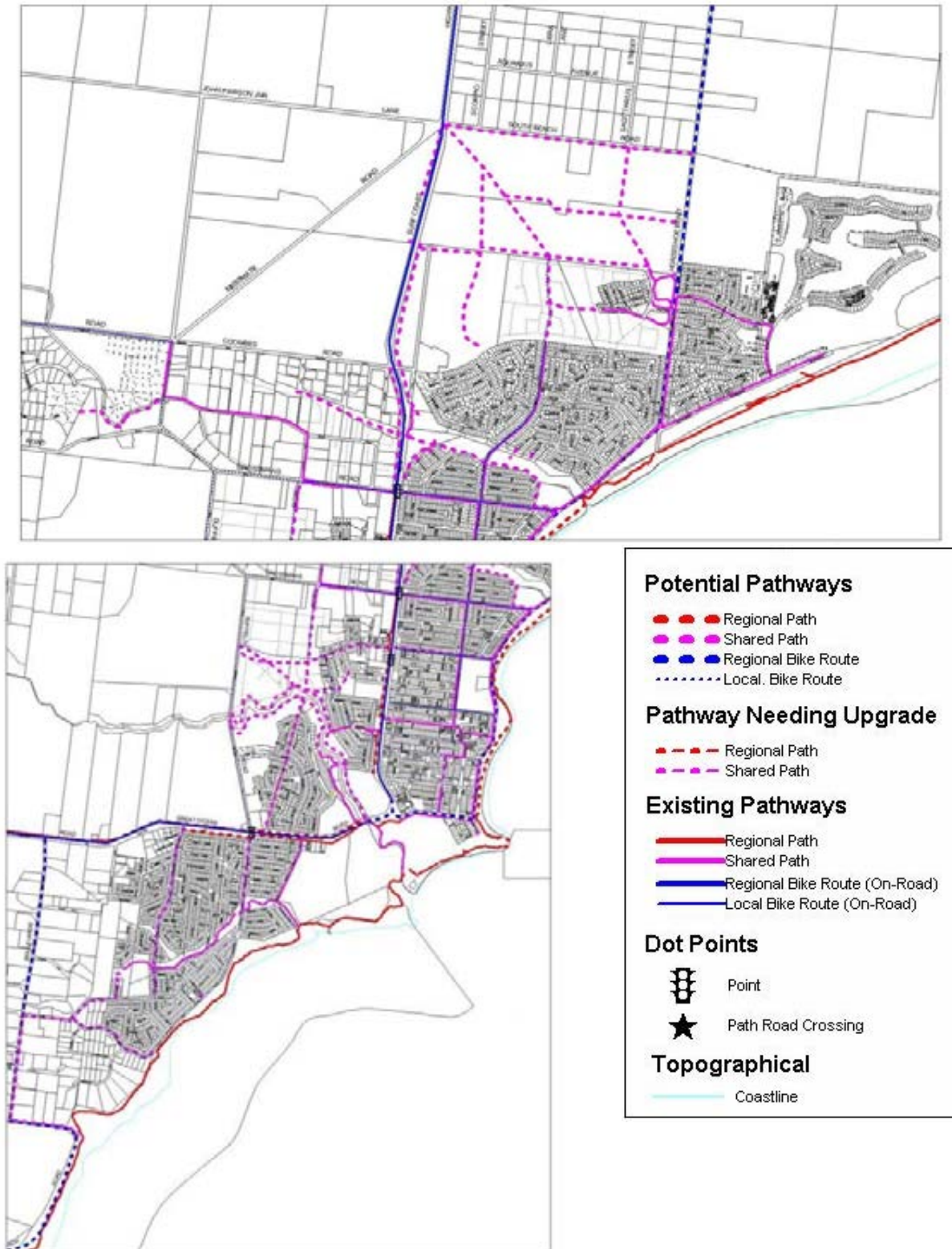
Walking / Cycling

- Walking and cycling shall be encouraged by concentrating attractions in highly accessible activity centres.
- Attention to urban design and the treatment of roads as public spaces will make walking and cycling an attractive transport option.
- Pathways shall be provided and designed in accordance with the Path Hierarchy of the Surf Coast Pathways Strategy and shall have regard for the needs of the disabled and elderly. Plan 5.5 shows the existing and proposed pathways strategy of regional and shared paths / bike routes. This should be updated in the Torquay North area in particular to reflect proposed open space links.
- The potential regional on-road cycle route along Horseshoe Bend Road (designated PP1079 in the Pathways Strategy), linking Torquay with Geelong, is to be investigated for its potential to provide a segregated cycle route that links with the planned open spaces/pathways of the Armstrong Creek urban growth area.
- Pathway routes should have surveillance from buildings and roads where possible. Pathways through car spaces or other unsupervised spaces should be avoided.
- Cycle storage facilities should be provided at public transport nodes to encourage multi-purpose trips.

Public Transport

- Encouragement is to be given to increasing and improving the public bus service, both within the urban areas of Torquay / Jan Juc and between Torquay and Geelong. Bus routes should follow Link and Collector roads and link key destinations such as activity centres, schools and the regional recreation reserve.
- A centralised bus stop should be investigated for a point along the Surf Coast Highway providing a direct route service to Geelong, timetabled to connect with train services at Geelong. The local bus service in Torquay / Jan Juc should be timetabled to connect with the Geelong service. The centralised bus stop should incorporate detailed timetable information, lounge and amenities areas, real time information displays and a park and ride facility. The centralised bus stop could be connected to an existing or future Council / public building.
- The investigation into the viability of the establishment of a long term public transport route (rail or light rail) between Geelong and Torquay should be advocated with the appropriate State Government Department(s), in response to options raised by the Armstrong Creek Urban Growth Area Plan.

Plan 5.5: Pathway Network



Social Infrastructure and Community Development

Objective

To facilitate the timely provision of a range of community and recreation facilities to meet the needs of local residents, and promote community health and cohesion.

Strategic Responses

Social Infrastructure Needs and Design Requirements

- A summary of the key community and recreation facilities (existing and required) needed to support development in Torquay and Jan Juc is shown in Table 5.2.
- Social infrastructure will be distributed within community hubs across the township to meet local needs and ensure accessibility for all. The proposed precinct location of key facilities is shown on Plan 5.6.
- Higher order community facilities such as a branch library will be situated in the town centre, or key community hub, to maximise accessibility.
- Higher order recreation facilities including a multi-purpose stadium, etc will be concentrated in the district recreation reserve. This is likely to be located in Precinct 3 where flatter land is available and the Highway frontage would make the site very accessible.
- Local sporting fields and associated facilities will be located in the designated active open space areas of each precinct. These are shown on Plan 5.7a & b. The sites are generally centrally located and integrated with either precinct activity centres or school sites, though topographical constraints in some precincts strongly influence location.
- The siting and design of social infrastructure should facilitate service co-location and integration.
- Community buildings should showcase sustainable design, be architecturally significant and occupy prominent sites within activity centres, providing opportunities for informal gatherings and public events.
- The school site in Torquay North (Precinct 3) has been designated in accordance with the Torquay North Outline Development Plan. The commitment of the Department of Education and Training to the establishment of this school will be required within the short to medium term. Similarly, the planning for schools in the Torquay West growth corridor will be paramount during the preparation of a Growth Area Framework Plan for this corridor and will require the support of the Department.

Table 5.2: Community and Indoor Recreation Facilities

Facility	Precinct	Elements	Description
Community House	1a	Existing <ul style="list-style-type: none"> ▪ meeting space ▪ adult education (ADASS) ▪ historical society Proposed <ul style="list-style-type: none"> ▪ additional meeting space 	Spring Creek House is an existing local facility in Price Street that serves the Torquay / Jan Juc community.
Senior Citizen's Centre	1a	Existing <ul style="list-style-type: none"> ▪ meeting space ▪ small performing arts stage 	The centre is undergoing an internal refurbishment to modernise.
Hall	1a	Existing <ul style="list-style-type: none"> ▪ meeting space ▪ performing arts stage Proposed <ul style="list-style-type: none"> ▪ additional meeting space 	The Torquay Improvement Association Hall is a community run facility located in Price Street.

Facility	Precinct	Elements	Description
Children's Services Facility	1b	Existing <ul style="list-style-type: none"> ▪ double pre-school ▪ MCH ▪ meeting space 	New facility opened in 2006 located in Grossmans Rd.
Branch Library	1b	Existing	The branch library services the Torquay / Jan Juc community and is likely to outgrow its premises in the medium to long term. Future options for its expansion or relocation will require investigation.
Multi-purpose Stadium	1b	Existing <ul style="list-style-type: none"> ▪ 1 court / cinema ▪ activity room ▪ amenities and administration area 	The Surfworld complex caters for some of the indoor sporting needs of the Torquay / Jan Juc community. It provides for basketball, netball, volleyball, badminton, aerobics and other activities. It is also set up as a cinema that operates over the summer school holiday period and provides a school holiday child care service.
Museum	1b	Existing <ul style="list-style-type: none"> ▪ Surfworld museum 	Contained within the same complex as the multi-purpose stadium, the surfworld museum is a key tourist attraction that has outgrown its premises and would benefit from being located in a more prominent position.
Tourist Information Centre	1b	Existing <ul style="list-style-type: none"> ▪ shop 	This facility is contained in the same complex as the museum and suffers the same issues.
Swimming Pool	1b	Proposed <ul style="list-style-type: none"> ▪ 25m indoor 	This is a private pool used predominantly for learn to swim classes.
Childcare Centre	1b	Existing <ul style="list-style-type: none"> ▪ land only 	Approval has been granted for the establishment of a facility opposite the primary school to be constructed by a private sector provider.
Government Primary School	1b	Existing <ul style="list-style-type: none"> ▪ school buildings and grounds Proposed <ul style="list-style-type: none"> ▪ P-9 	This primary school was designed to cater for up to 800 students. The Ed Dept has recently announced its intention to expand the school to a P-9 within the existing school grounds.
Catholic Primary School	1b	Existing <ul style="list-style-type: none"> ▪ school buildings & grounds 	The existing primary school has capacity to grow on its site beyond the current building infrastructure capacity of 330 students.
Children Services Facility	2	Existing <ul style="list-style-type: none"> ▪ double pre-school 	The Jan Juc pre-school has the capacity to expand to provide a second 4 year old group.
Neighbourhood Centre	3	Proposed <ul style="list-style-type: none"> ▪ double preschool ▪ meeting space ▪ consulting rooms for visiting services 	Local facility to provide children's services, community support services and meeting space for precinct 3 residents. To be located in community hub.
Multi-purpose Stadium	3	Proposed <ul style="list-style-type: none"> ▪ 4 courts ▪ amenities and administration area 	District (regional) facility that will cater for the indoor sporting needs of the Torquay / Jan Juc community. It will provide for basketball, netball, volleyball, badminton and other activities. To be located in the district recreation node.
Government Primary School	3	Proposed <ul style="list-style-type: none"> ▪ school buildings and grounds 	To be provided by the Dept. Of Education to meet primary education needs of local residents subject to commitment of Dept.

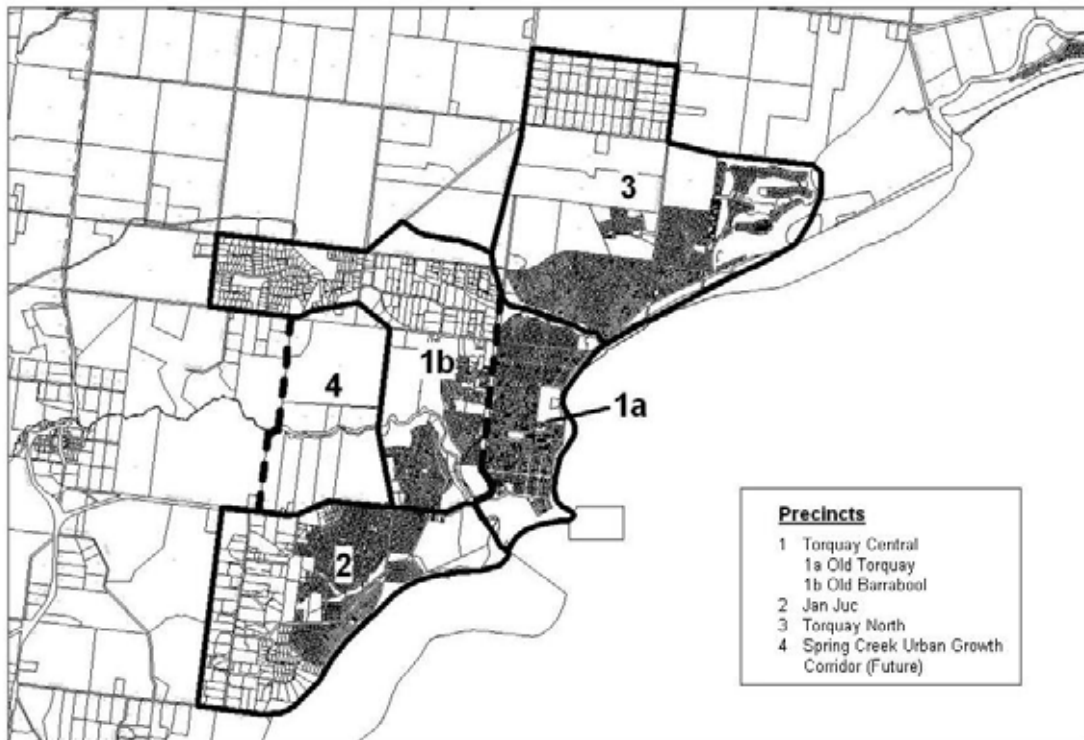
Facility	Precinct	Elements	Description
Neighbourhood Centre	4	Proposed <ul style="list-style-type: none"> ▪ double preschool ▪ meeting space – large & small ▪ consulting rooms for visiting services ▪ dedicated arts/cultural space 	Local facility to provide children's services, community support services and meeting space for precinct 4 residents, with district (regional) role for expanded arts/cultural facility. To be located in community hub.
Community Theatre	4	Proposed <ul style="list-style-type: none"> ▪ 200-300 seat capacity 	This facility will serve the local region and could also be used by the local schools. To be located in community hub.
Government Primary School	4	Proposed <ul style="list-style-type: none"> ▪ school buildings and grounds 	To be provided by the Dept. Of Education to meet primary education needs of local residents subject to commitment of Dept. Could be as a P-12.
Government Secondary School	4	Proposed <ul style="list-style-type: none"> ▪ school buildings and grounds 	To be provided by the Dept. Of Education to meet secondary education needs of local residents subject to commitment of Dept. Could be as a P-12.

Outdoor Recreation Facilities

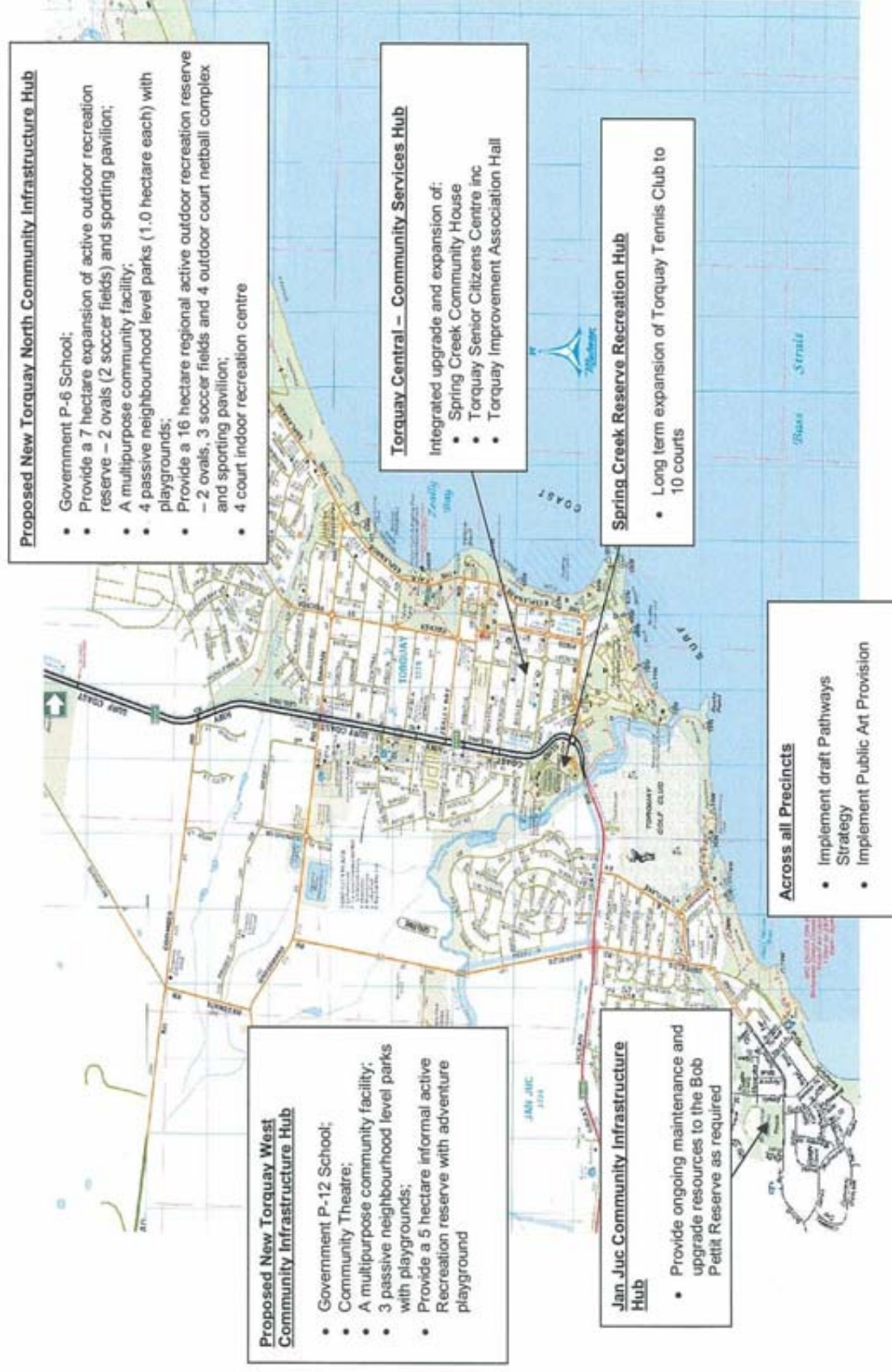
Facility	Precinct	Elements	Description
Bowling Club	1a	Existing <ul style="list-style-type: none"> ▪ 2 greens & clubhouse 	Situated on foreshore managed land in Taylor Park, the existing Torquay Bowls Club has no capacity to expand without encroaching into park reserve.
Football / Cricket Reserve	1b	Existing <ul style="list-style-type: none"> ▪ 1 oval & pavilion ▪ cricket practice facility 	All situated within the Spring Creek Recreation Reserve. There is no capacity to expand football / cricket facilities. These are suitable for meeting the needs of the local residents of Precincts 1a & 3. The tennis centre has capacity to add 2 additional courts and meets the needs of the expanded town. Refer to Spring Creek Reserve Master Plan.
Tennis Centre		<ul style="list-style-type: none"> ▪ 4 modgrass & 2 asphalt courts & small clubroom 	
Netball		<ul style="list-style-type: none"> ▪ 2 asphalt courts 	
Soccer	1b	Existing <ul style="list-style-type: none"> ▪ 1 soccer field (additional land required) 	An area originally designated south of the primary school for an oval is too small and steeply sloping. A small portion only of this area is required to enable the reconfiguration of the school's soccer field to provide room for an aquatic facility within the school grounds.
Skate Park	1b	Existing <ul style="list-style-type: none"> ▪ Concrete complex of ramps etc 	Located in Beach Road adjacent Surfworld. The requirement for an additional park will need to be monitored.
Football / Cricket Reserve	2	Existing <ul style="list-style-type: none"> ▪ 1 oval 	These facilities are in the Bob Pettit Reserve and serve the local community of Precinct 2.
Tennis Centre		<ul style="list-style-type: none"> ▪ 5 courts & clubroom 	
Football / Cricket Reserve	3	Existing <ul style="list-style-type: none"> ▪ 1 oval, pavilion, cricket practice facilities. ▪ Playground Proposed <ul style="list-style-type: none"> ▪ 2 ovals & pavilion 	Local facility to provide outdoor recreation needs of Precinct 3 residents.
Soccer Reserve	3	Proposed <ul style="list-style-type: none"> ▪ 2 soccer fields 	Local facility provided on one of the above ovals for Precinct 3 residents.

Facility	Precinct	Elements	Description
Tennis	3	Existing <ul style="list-style-type: none"> ▪ 2 courts 	Local precinct facility sited in the Deep Creek Linear Reserve. No associated clubroom.
District Football / Cricket Reserve	3	Proposed <ul style="list-style-type: none"> ▪ 2 ovals, cricket practice facilities. ▪ Pavilion ▪ 3 soccer fields ▪ 4 netball courts ▪ playground 	District facility to provide a range of outdoor recreation needs for the whole of Torquay / Jan Juc residents.
Soccer			
Netball			
Active Recreation Reserve	4	Proposed <ul style="list-style-type: none"> ▪ basic playing field ▪ amenities block ▪ adventure playground 	Local informal active recreation ground for the residents of Precinct 4 allowing for topographical constraints of this precinct.

Planning Precincts



Plan 5.6 - Proposed Torquay / Jan Juc Community Infrastructure Distribution Plan



The Open Space Network

Objective

To increase the provision and quality of all forms of open space to meet the broad range of needs of the community, and to site new open space to ensure its accessibility to all members of the community.

Strategic Responses

Open Space Provision

- Open space is required for a range of environmental and recreational purposes. The broad open space types in the Strategy Plan are:
 - Passive recreation/Conservation/Drainage reserve
 - Active recreation
 - Golf Course

Land that is physically encumbered, making it generally unsuitable for development, will not be counted as part of the open space contribution in any development contribution plan. Encumbered land is generally defined as:

- Land with high conservation / flora & fauna values;
- Land that is steeply sloping (eg greater than 1 in 3);
- Land affected by a servicing easement (eg high voltage power lines, water pipe and sewer easements); and
- Land subject to 1 in 100 year flooding. (Note, some of these areas may count as part of an open space contribution where the land is able to be reasonably used as part of an open space area or link, exclusive of land within 30 metres of a waterway or 15 metres of an intermittent natural drainage way).

Plan 5.7a & b shows the configuration of the overall network and identifies the various open space types. A public open space contribution of up to 10% of gross developable land is warranted to meet the recreational needs of the community.

- Grass Tree Park shall be developed as a major district conservation park providing both passive needs and conservation values for the town and surrounding rural communities.
- Local parks shall generally be not less than 1ha in area and distributed so that all dwellings are within 400 – 500 metres of a local park.
- Open space shall be designed to provide flexibility to be able to adapt to the changing needs of the community and provide a range of recreational experiences across the town.

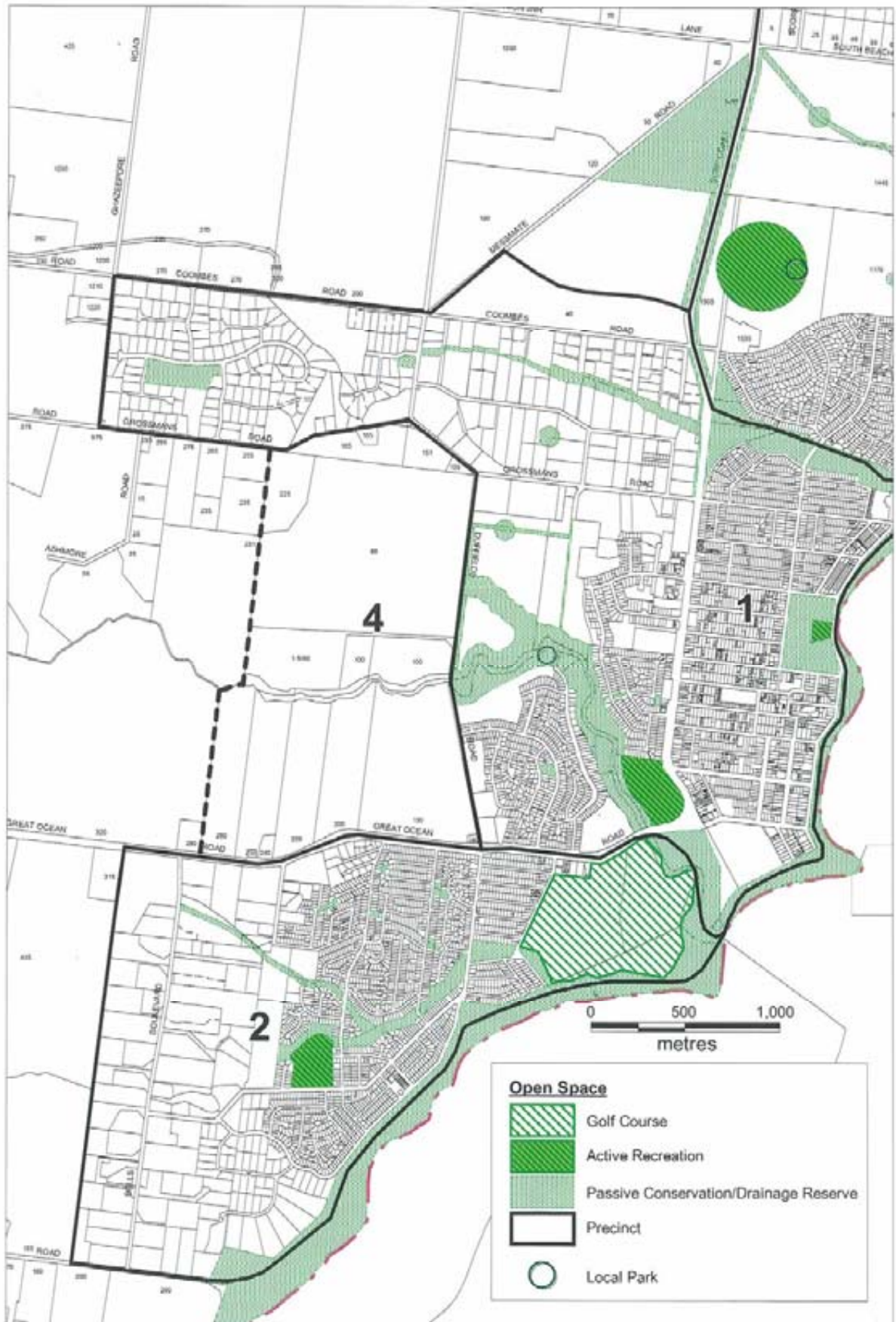
Access and Integration

- Management responsibilities for open space along and adjacent the foreshore should be rationalised whilst maintaining and improving cooperation in land use and development of these spaces to best serve the community.
- The open space network shall be designed where the opportunity presents, to provide habitat links between sites of environmental significance within and external to the Structure Plan area. Such habitat links should generally be not less than 30 metres in width.
- The open space network shall be designed to maximise connectivity between public spaces and the surrounding communities, and contribute to the provision of a safe network of paths / trails.
- Open space should be fronted by building facades or streets – not rear fences.
- Open space should be accessible to, and cater for the needs of all possible user groups including elderly, disabled and young people.

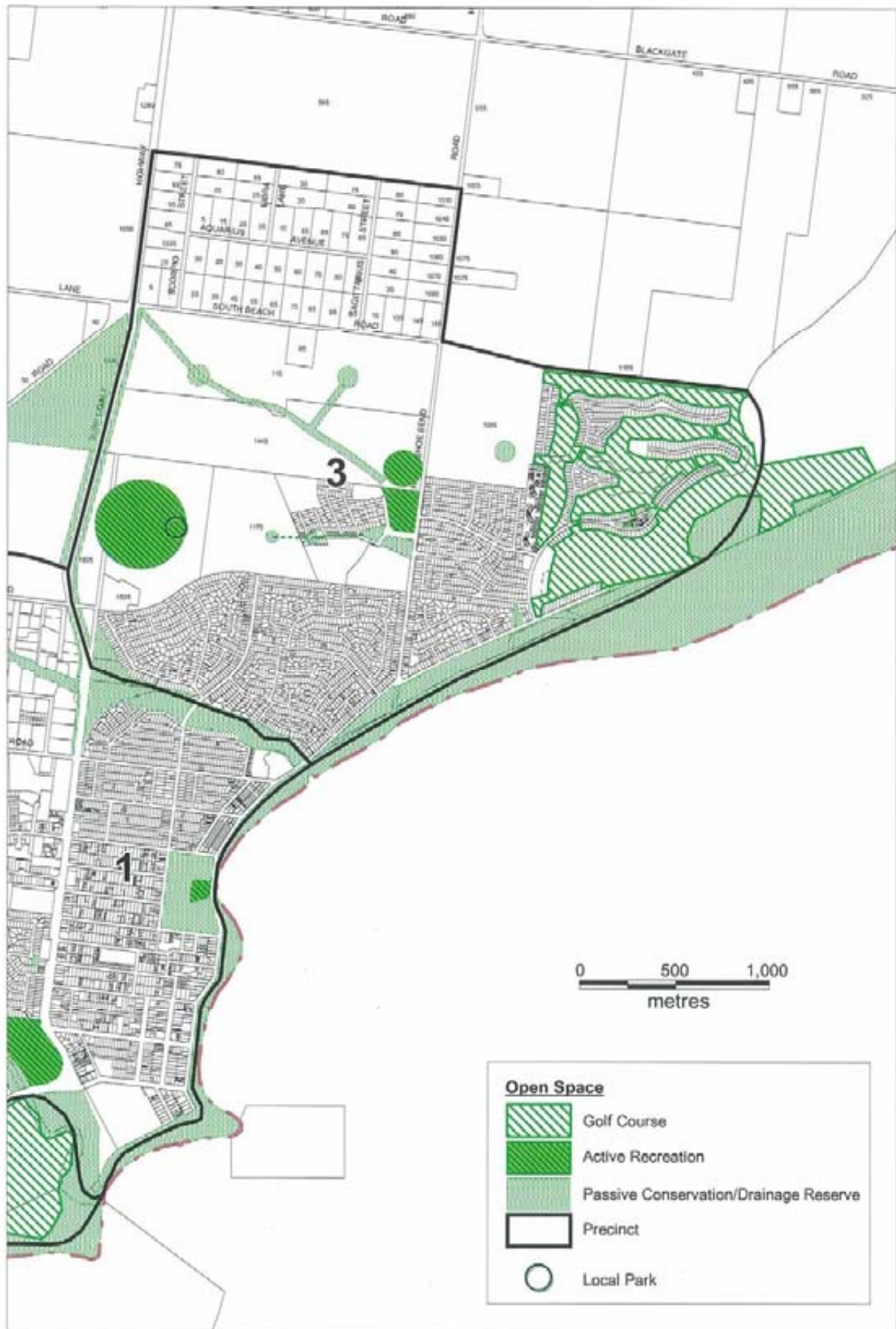
Drainage Functions

- The open space network should be designed to complement the water sensitive urban design treatments that will be applied across Torquay Jan Juc. The drainage system should comprise natural style watercourses and wetlands that contribute to efficient stormwater management and urban amenity.

Plan 5.7a: Open Space Network



Plan 5.7b: Open Space Network



Servicing and Drainage

Objective

To integrate development with the efficient provision and use of service infrastructure, and encourage sustainable practices in the use of resources through planning and design.

Strategic Responses

Sewerage and Water

- The servicing (water and sewer) of all development must meet the requirements of Barwon Water in accordance with that authority's appropriate servicing strategies. Barwon Water reserves the right to make changes to their servicing strategies as and when required to suit progressive changes to water and sewer management principles and meet staging and timing requirements of developers in the area.
- Service infrastructure should be utilised efficiently, avoiding leapfrogging of undeveloped areas or premature duplication.
- High priority will be given into continuing investigation into opportunities for the reuse of water, both in the public and private realm, in conjunction with relevant State and Regional Authorities. Subject to the appropriate treatment and desalination of waste water, a breadth of opportunities for residential, commercial and intensive agricultural applications of treated water exists within the Torquay settlement boundary. Accordingly, the construction of the necessary servicing infrastructure should be planned for at an early stage.

Drainage

- The principles of water sensitive urban design will be applied in a co-ordinated manner across all precincts, with the aim of limiting the quantity, and improving the quality, of stormwater entering waterways by limiting impervious surface areas, capturing run-off, and allowing biofiltration to occur. Existing stormwater systems will be progressively upgraded to meet these standards.
- The drainage system should return stormwater to the groundwater system close to the site where it is captured. Alterations to ground water depth and water balance should be limited.
- The drainage system must be designed so that there are no increased risks to public safety and property. Flows downstream from a development site should not exceed pre-development levels unless approval is granted by Council.

Infrastructure Charges

Objective

To put in place an equitable funding framework that will ensure the timely provision of infrastructure that is essential to the needs of a sustainable community.

Strategic Responses

- The use of development contributions to assist in the provision of infrastructure in coastal settlements is advocated in the *Great Ocean Road Region Strategy, 2004*. The Development Contributions Plan system is based on the framework of the DCP legislation of the Planning and Environment Act 1987.
- A Development Contributions Plan shall be prepared for Torquay / Jan Juc. The need for infrastructure will be determined according to the anticipated development scenario for Torquay / Jan Juc – as detailed in Chapter 4 of this Structure Plan report. The following background studies will inform the selection of leviable infrastructure items in the DCP:
 - Surf Coast Open Space Strategy (Robin Crocker & Assoc et al, 2004).
 - Surf Coast Pathways Strategy (Surf Coast Shire & Parklinks P/L, 2006)
 - Torquay and Jan Juc Retail Strategy Review 2005 (Essential Economics P/L)
 - Torquay & Jan Juc Community Infrastructure Assessment (ASR Research P/L, 2006).
 - Torquay & Jan Juc Transport Infrastructure Assessment (Traffix Group P/L, 2006).
 - Torquay & Jan Juc Sports Ground Strategy (ASR Research P/L, 2007).

Future

Timing of the future review of this Structure Plan will be dependent on many factors, not the least of which will be the continuing rate of growth in the township, future legislative changes, the uncertain impacts of the Geelong Ring Road and implications for accessing Torquay / Jan Juc, and the outcomes of the Rural Strategy Review and the implications of this in dealing with the demand for tourist developments. Many of these will influence the development of the town and may warrant a thorough review of previously accepted policies, including the northern settlement boundary, development densities and role/location of activity centres. The pending development of the Spring Creek Valley Urban Framework Plan will be a major influence in this regard.

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- Stratcorp Consulting Pty Ltd (2005)**, G21 Regional Sports Development Plan.
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- Traffix Group Pty Ltd (2007)**, Torquay / Jan Juc Transport Infrastructure Assessment.
- Trengrove (2001)**, Bellarine Yellow Gums in the Surf Coast Shire.
- Urban Enterprise Pty Ltd (2006)**, Tourism Strategic Plan for the Surf Coast Region.
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- World Commission on the Environment (1987)**, Our Common Future.

APPENDIX 1

**Audit of Implementation of Actions Recommended in the
Comprehensive Strategy Plan for Torquay Jan Juc 1996.**

APPENDIX 1**Audit of Implementation of Actions Recommended in the Comprehensive Strategy Plan for Torquay Jan Juc 1996.**

SUMMARY OF KEY ACTIONS TO IMPLEMENT STRATEGY	Lead Agent	Status of Action	Comments
General			
Establish management procedures and responsibilities within Council to implement Strategy Plan	SCS	Not formally done.	A process has since been put in place to ensure that the recommendations of Council studies are followed up and acted on.
Monitor outcomes of the Greater City of Geelong Strategy Plan Study (which is currently underway) and assess its possible impacts on growth in Torquay/Jan Juc	SCS	Ongoing	CoGG has recently commenced a study for the Armstrong Creek growth corridor. This study will be taken into account in preparation of the 2005 Strategy.
Population			
Continually monitor population growth in Torquay/Jan Juc and update population estimates accordingly.	SCS & ABS Census of Population & Housing	Ongoing	ID Consulting P/L completed population projections in 2004 for SCS and updated these in 2006. SCS has also prepared a Land Supply Analysis of T/JJ for 2004 and 2005.
Prepare a detailed socio-economic and demographic analyses of the four residential localities of Jan Juc, West Torquay, Old Torquay and Wombah Park and review as development occurs.	SCS	Not done.	Identification of relevant precincts and their population characteristics is being undertaken as part of the Structure Plan.
Environment			
Thompson Creek Valley – Complete guidelines for Landscape Development and encourage private initiatives directly with farmers and with other land care groups.	SCS / CCMA / Land Care Groups	Ongoing	Planning Scheme provides some encouragement for landscaping. Surf Coast & Inland plains network – body receives & gets funding in Thompson Creek Catchment area.
Breamlea Wetlands – work with the Department of Conservation and Natural Resources to produce a Management Plan to revitalise and protect the area.	SCS / Parks Vic	In progress.	The Karaaf wetlands have been transferred to Parks Vic to manage as part of Breamlea wetlands area. Parks Vic to produce a management plan.
Eastern Low Lands – Produce an outline development plan	SCS	Not done	Retained as rural to maintain buffer to Thompson's Creek. An ODP is not considered necessary.
Torquay Hills – Complete guidelines for development, including a streetscape and open space plan, avenue concept for Surf Coast Highway, and guidelines for visually intensive uses such as rural residential and employment uses along the highway	SCS	In part	Torquay Urban Design Framework in 1998 was adopted – includes landscaping treatment to SC highway. A DPO has been applied to the Torquay Industrial Estate.
Spring Creek Valley – prepare a detailed ODP to create a "natural system" led land-use and circulation plan	SCS	Not commenced	An ODP for land west of Duffields Road will be prepared when this land is investigated for future development.
Bells Beach Hinterland and Ironbark Basin -Explore with the Surfing Industry and State Agencies feasibility for a Surfing Icon near the Bells area, for information on conditions, cultural interpretation, education etc,	SCS	Bells Beach Master plan prepared.	Bells Beach Masterplan identifies need for Information & interpretation on cultural heritage, recreational flora & fauna values.

SUMMARY OF KEY ACTIONS TO IMPLEMENT STRATEGY	Lead Agent	Status of Action	Comments
and prepare an ODP for the area		Bells Beach has been heritage listed.	Rather than establish a surfing icon it is envisaged that a series of interpretative boards/signs will be established throughout the reserve.
<p>Gilbert Street Commercial and Retail Centre</p> <p>Prepare an Urban Design Framework Plan</p> <p>Publish a Gilbert Street Information Sheet and, with Traders, quickly assemble an Action Committee to push for realisation of the goals of the Strategy Plan</p> <p>Identify and begin immediate works – including tree planting</p> <p>Create a special fast-track approach process for private projects, which are clearly meeting with goals and creating the vision for Gilbert Street</p>	<p>SCS</p> <p>SCS – Economic Development Unit</p> <p>SCS – Infrastructure Unit</p> <p>SCS – Planning Unit</p>	<p>Completed</p> <p>Commenced</p> <p>Commenced</p> <p>Rejected</p>	<p>Torquay Urban Design Framework adopted in 1998. ‘Jump Starting the Heart’ streetscape project for the town centre completed 2000.</p> <p>Torquay Town Centre Reference Group formed to assist in implementation of streetscape works.</p> <p>Amended streetscape plan has been adopted – special charge scheme initiated.</p>
<p>Bell Street / Torquay Camping and Caravan Park</p> <p>Rationalise the caravan park area and redevelop the coast car park and ensure that the visual/physical links between Bell Street and the beach are realised</p> <p>Develop a re-vegetation program for the entire precinct, consistent with indigenous planting patterns that also extend along the foreshore (including the Surf Life Saving Club area) and into the Spring Creek Valley west and Point Danger area east.</p> <p>Create street planting in a median, consistent with the above, that increases amenity and helps enframe views to the coast</p> <p>Examine the grades closely in this area of the coast, to determine if (with relatively modest works), further visual exposure of the ocean is possible</p> <p>In concert with this, create a public liaison programme, attracting Beach/foreshore related uses in Bell Street, eg, Restaurants, clothing shops, cabins, motels, restaurants, surf-hire etc.</p> <p>Complete a detailed Urban design Concept for Bell Street</p>	<p>GORCC</p> <p>SCS / GORCC</p> <p>SCS – Infrastructure Unit</p> <p>GORCC</p> <p>SCS – Planning Unit</p> <p>SCS – Infrastructure Unit</p>	<p>Completed.</p> <p>In part</p> <p>Completed</p> <p>Rejected</p> <p>In Part</p> <p>Completed</p>	<p>Caravan Park presentation to Bell St and adjacent car park have been upgraded. The dune system and current tree plantings would not enable any view lines to the ocean from Bell St.</p> <p>A revegetation program has not been developed but a number of plantings have occurred with participation from Service Groups along the Spring Creek environs and the Torquay Surf Beach</p> <p>Bell Street Streetscape project implemented</p> <p>Masterplans have been developed for the foreshore – this proposal has not been incorporated.</p> <p>Land fronting The Esplanade at the end of Gilbert Street is zoned Special Use to encourage tourist related uses.</p> <p>Bell Street Streetscape project implemented</p>
<p>Wombah Park Estate/Torquay West</p> <p>Commence preparation of an open space and streetscape concept plan that addresses streets as part of the open space system.</p> <p>Provide technical information to landowners (eg. Plant lists and handy hints) to encourage landscape development on private land</p>	<p>SCS</p> <p>SCS – Environment Unit</p>	<p>In Part</p> <p>Ongoing</p>	<p>Torquay North ODP establishes streetscape theme. Open Space Strategy promotes open space linkages.</p> <p>Plant lists for Torquay/Jan Juc completed in 2003.</p>

SUMMARY OF KEY ACTIONS TO IMPLEMENT STRATEGY	Lead Agent	Status of Action	Comments
Identify immediate action areas – on Council controlled land, where works can be quickly planned and implemented	SCS – Infrastructure Unit	Not done	
<p>Surf Coast Plaza and Municipal Precinct</p> <p>Complete a landscape plan for the precinct that would enable immediate mass-planting, to quickly transform the character of the area</p> <p>Create either a frontage for Civic functions on the Surf Coast Highway or by way of set backs and view corridors give greater visual presence to the existing facilities</p> <p>Encourage with guidelines, publicity, technical notes etc. private owners to pursue implementation of the plan</p> <p>Identify at least one street (probably Zeally Bay Road) as the link to Gilbert Street and then give it a special treatment that makes it an obvious and Central Avenue in the Torquay Township</p>	<p>SCS</p> <p>SCS – Planning</p> <p>SCS</p> <p>SCS – Infrastructure</p>	<p>Completed</p> <p>Commenced</p> <p>Ongoing</p> <p>In Part</p>	<p>Torquay Urban Design Framework – 1988 guides landscaping along the Highway.</p> <p>Design Guidelines for Surf Coast Highway adopted in 2005.</p> <p>Design Guidelines adopted for Surf Coast Highway in 2005</p> <p>Road hierarchy adopted as part of Torquay Urban Design Framework – but no planting along identified street yet.</p>
<p>Stuart Avenue, Jan Juc</p> <p>Identify early works such as forward planting of the adjacent foreshore and surrounding streets</p> <p>Carry out special treatments and signage works on the Government Road, Ocean Boulevard and Sunset Strip to underscore their importance</p> <p>Make traffic and parking improvements</p> <p>Prepare detailed Urban Design Concept Plans, followed by construction</p>	SCS – Infrastructure Unit	Completed	Streetscape improvement works for the local shopping centre have been completed.
<p>Jan Juc Foreshore</p> <p>Set up Advisory Committee for Coast Strategy</p> <p>Review Jan Juc Beach car parks and, in the context of the strategy, re-design and re-vegetate these</p> <p>Examine the impacts of the Golf Course on the Spring Creek and Coastal Environment</p> <p>Prepare resources plan in order to realise the above goals</p>	GORCC	In Part	<p>Jan Juc Coast Action Group provide advice and actions in implementing the Jan Juc Masterplan.</p> <p>There has been a Masterplan for the Bird Rock Lookout and Carpark currently being approved by the DSE .</p>
<p>Main Surf Beach - Torquay</p> <p>Initiate the above policies as soon as possible</p> <p>Determine and initiate works that could commence immediately, such as further re-vegetation</p> <p>Enhance access and visual links from the Bell Street area</p>	GORCC	In Part	Masterplan has been prepared for the Torquay Foreshore, and some works have been implemented, others are awaiting funding.
<p>Point Danger and Front Beach</p> <p>Commence immediate works, such as re-vegetation etc, consistent with the goals for the area</p> <p>Commencement of detailed studies is required</p>	GORCC	In Part	'As above'
<p>Fishermans Beach and Yellow Bluff</p> <p>Commence preparation of Detailed Concept Plan</p> <p>Remove/relocate the toilet block</p> <p>Commence works that could occur immediately – re-vegetation of the Fishermans Beach area, using indigenous vegetation</p> <p>Create pedestrian access-ways, especially from the</p>	GORCC	In Part	<p>Completed Masterplan.</p> <p>Completed various planting around fisherman's beach, particular near pump station</p> <p>Other works shown on Masterplan to be completed as funds become available</p>

SUMMARY OF KEY ACTIONS TO IMPLEMENT STRATEGY	Lead Agent	Status of Action	Comments
Gilbert Street area and Yellow Bluff, to the beach Limit direct vehicle access from the Esplanade by way of kerbs or bollards			
Whites Beach Limit car parking and access roads and re-vegetate Continue re-vegetation in the back dune area Fence sensitive areas as has been done around water bodies (at north-east end)	SCS / GORCC	In Part	Master Plan adopted by Shire in 2005, works not yet commenced. The implementation phase for 2005/06 has commenced, concurrent with the upgrade of the Barwon Water pumping station. Landscape works and fencing in front of The Sands completed 2004.
Taylor Park Establish and pursue a Master Plan Brief for this area Commence preliminary work by carrying out a vegetation and site feature survey	GORCC	Ongoing	Landscaping works combined with drainage treatment undertaken.
Housing			
Review and rationalise the existing residential land use zones to incorporate the new state-wide residential zones	SCS – Planning & Development Unit	Completed	Undertaken when new format Planning Scheme introduced in 2000
Support current amendments R29 (land on Horseshoe Bend Road) and RL33 (Strathmore Drive, Jan Juc)	SCS	Completed	Amendments supported
Initiate consultation with residents and land owners to the north of Grossmans Road to review the potential for this parcel of rural residential development to be subdivided further	SCS – Planning & Development Unit	Commenced	First stage has been rezoned (adopted 2005). Further rezoning will be subject to land owner support and resources.
Refer suggestions regarding rural residential areas to the consultants undertaking the Rural Strategy	SCS – Planning & Development Unit	Completed	Rural Residential Strategy adopted as part of new format planning scheme. A review of this strategy has commenced.
Monitor residential development and dwelling commencements on an annual basis for Torquay/Jan Juc	SCS – Planning & Development Unit	Ongoing	Review of building approvals and land supply & demand undertaken annually.
Economy			
Continue to monitor the rate of investment and the creation of employment in order to gauge the demand for land for various economic activities	SCS	Ongoing	Regular reviews of demand/supply of retail/industrial floor space. Retail strategy review 2003 & 2005 & Industrial Floor Space Review 2004.
Refuse the planning application for a new shopping centre on the Surf Coast Highway (and discuss with the applicant alternatives uses for the land including tourist related commercial activities such as fast-food outlets, peripheral sales activities, petrol stations and visitor accommodation)	SCS	Completed	Planning application refused. This land has now been rezoned to Special Use Zone, Schedule 5

SUMMARY OF KEY ACTIONS TO IMPLEMENT STRATEGY	Lead Agent	Status of Action	Comments
Immediately seek investor interest in developing a major retail expansion of Gilbert Street	SCS	Completed	Rezoning of Town Centre in 2000 to facilitate new Safeway supermarket which opened in 2004. Former school site rezoned in 2004 to facilitate retail expansion on that site.
Community Services			
Ensure that detailed Community and Leisure Plans prepared by Council are integrated with this strategy	SCS – Leisure & Community Services (L&CS)	Ongoing	
Undertake detailed studies and prepare policies regarding the need for and the timing of the provision of major new local government facilities which may be required in Torquay/Jan Juc in the future	SCS	In Part	Public Open Space Strategy 2004 Pathways Strategy 2005 Review of SCS office accommodation Torquay District Future Children's Service needs analysis 2004
Reinvestigate the feasibility of an indoor swimming pool now that a commercial learn-to-swim pool has been established in Torquay	SCS – L&CS	Ongoing	Stand alone aquatic centre is difficult to justify in Torquay. A facility associated with the primary school is being investigated.
Commence discussions with other public agencies and land owners in the Price Street area and prepare an integrated concept plan for the development of this area as a secondary municipal precinct	SCS	Commenced	Kindergarten has relocated to Grossmans Road Police Station to relocate to Surf Coast Highway Discussions commenced with Torquay Improvement Assoc and Spring Creek House to integrate new facilities and upgrades.
Commence discussions with DSE regarding education planning in Torquay and prepare a formal submission to the Department seeking special consideration of the early provision of a post primary school and implement other elements of the strategy	SCS	Ongoing	Discussions held, but State Government reluctant to commit to a secondary school. Commitment given for a P-9 College
Ensure that outline development planning for the future residential development area in North Torquay takes into account the need for a possible primary school, post primary (depending on outcome of discussions with Council), outdoor recreation facility, local community services and facilities and retail/commercial facilities	SCS	Completed	ODP prepared for Torquay North in 1997 and updated in 2004 which includes central sporting facilities, community facility, retail & provision for a primary school.
Regularly monitor the rate and location of population growth within Torquay/Jan Juc and the changing characteristics of the population, to provide a sound basis for the planning of community and leisure services and facilities	SCS – L&CS	Ongoing	ID Consulting P/L undertook assessment of population projections in 2004. Detailed demographic info at this level is difficult to collate.

SUMMARY OF KEY ACTIONS TO IMPLEMENT STRATEGY	Lead Agent	Status of Action	Comments
Transport			
In the short term, signalise the intersection of Grossmans Road/Surf Coast Highway and then the Duffields Road/Great Ocean Road Intersection	Vic Roads	Completed	Traffic Lights installed at both intersections.
Prepare a design of the Surf Coast Highway/Messmate Road/South Beach Road intersection as a roundabout	Vic Roads	Not done	Will be required in the future.
Prepare a bicycle strategy for the existing Torquay area and incorporate bicycle facilities within new subdivisions complementary to the bicycle strategy	SCS – L&CS	Completed	Pathways Strategy for the Shire has been adopted. Requirement for bike facilities has been incorporated in to VPPs.
Develop a Master Plan for The Esplanade incorporating urban design and traffic engineering treatments to reinforce a low speed environment along the route	SCS – Infrastructure	Not commenced	Future upgrade of The Esplanade is required and planning/design should include these matters
Develop a Master Plan for car parking areas along The Esplanade, Point Danger, and Jan Juc incorporating urban design and traffic engineering treatments that rationalise formal car parking areas and designates appropriate grassed areas for overflow parking	GORCC in consultation with Surf Coast Shire which manages The Esplanade	Completed	GORCC have designed and tendered the project out for the Point Danger redevelopment as per the Masterplan. Some design works on Jan Juc Carpark have been developed including a round about as traffic calming and the lower carpark has been redeveloped for improved traffic movement
Liaise with bus operators to: Review the start/finish times for schools in the Geelong area and the bus service times; and Identify the pattern of 0 and 1 car permanent households in the urban areas and the need for a local service	SCS – Infrastructure Unit	Ongoing	Discussions are ongoing with bus operators to provide a local bus service within Torquay / Jan Juc.
Establish a traffic count programme throughout the urban area, including surveys to compare flows in the holiday and non-holiday periods	SCS – Infrastructure Unit	Ongoing	Traffic count program is establishing a sound data base.
Establish a car parking survey programme of the commercial precincts and foreshore attractions to compare demands in the holiday and non-holiday periods	SCS – Infrastructure Unit	Completed	Parking surveys undertaken of the Gilbert Street centre in 2001 & 2003. Further regular surveys to be undertaken.
Infrastructure			
Liaise with authorities and give early notice of proposed zoning changes so that service upgrading can be undertaken in a timely and rational manner	SCS – P&E Unit	Ongoing	Ongoing liaison with Barwon Water & other servicing authorities regarding future planning
Planning Scheme Amendments			
Follow through the draft amendment process with the new State-wide residential zones and to implement these accordingly	SCS – P&E Unit	Completed	New format planning scheme adopted 2000
Initiate draft amendments for new Business and Industrial zones to replace existing business and service zones etc.	SCS – P&E Unit	Completed	New format planning scheme adopted 2000

SUMMARY OF KEY ACTIONS TO IMPLEMENT STRATEGY	Lead Agent	Status of Action	Comments
Funding			
Prepare a municipal funding policy	SCS	Not done	A municipal funding policy has not been prepared, however Council's financial health is being guided through the SRAP 2001.
Investigate the possibility of establishing a special rate, called the <i>Torquay/Jan Juc Improvement Rate</i> for improvement projects and town-wide infrastructure in Torquay/Jan Juc	SCS	Not done	Special charge schemes are investigated for specific projects rather than a whole of town scheme.
Prepare Development Contributions Plan(s) and subsequent planning scheme amendments for developing areas within Torquay/Jan Juc	SCS – P&E	Commenced	Individual DCPs apply through section 173 agreements. A broader DCP is being investigated as part of the Structure Plan.

Despite the lack of any formal process to monitor the implementation of the above actions, a large majority of the actions have been actioned and are either completed, no longer relevant or are ongoing. Of the few actions that remain outstanding, the following should be considered during the preparation of the Strategy 2005:

- Consider implications of Armstrong Creek Growth Corridor Strategy.
- Spring Creek Valley – prepare a detailed ODP to create a “natural system” led land-use and circulation plan.
- Develop a Master Plan for The Esplanade incorporating urban design and traffic engineering treatments to reinforce a low speed environment along the route.
- Prepare a municipal funding policy.

Appendix 2

Torquay Jan Juc Lot & Population Capacity Estimations (Mar 2006)

TORQUAY JAN JUC LOT & POPULATION CAPACITY ESTIMATIONS (MAR 2006)

Sub-Precincts (Refer to Map overpage)

TORQUAY NORTH PRECINCT	TN 1 - Wombah Pk / G B	TN 2 - South Beach	TN 3 - The Sands	TN 4 - The Quay	TN 5 - Torquay North	TN 6 - Torquay Heights	TOTAL
Broadhectare (ha)	0	0	0	0	210.2	0	
Dwellings 2005 ₁	1,181	290	190	0	0	59	1,720
Existing Vacant Lots ₂	193	135	294	48	0	0	670
Unsubdivided Res Land ₃	0	29	116	529	0	0	674
Future Resubdivision ₄	0	0	0	0	0	59	59
Future Residential ₅	0	0	0	0	2,094	0	2,094
Future Low Density Residential	0	0	0	0	0	0	0
TOTAL LOTS	1,374	454	600	577	2,522	118	5,645
Estimated Capacity Population₆	2,639	872	1,152	1,108	4,844	227	10,841

TORQUAY CENTRAL PRECINCT	TC 1 - Old Torquay	TC 2 - Ocean Views	TC 3 - Beach Road	TC 4 - Briody Estate	TC 5 - Coombes Rd LD	TOTAL
Broadhectare (ha)	0	7.5	56.3			
Dwellings 2005 ₁	1559	268	306	36	27	2,196
Existing Vacant Lots ₂	0	180	49	13	97	339
Unsubdivided Res Land ₃	0	136	0	0	280	416
Future Resubdivision ₄	625	0	0	600	8	1,233
Future Residential ₅	0	90	675	0	0	765
Future Low Density Residential	0	0	0	0	151	151
TOTAL LOTS	2,184	674	1,030	649	563	5,100
Estimated Capacity Population₆	4,194	1,294	1,978	1,246	1,081	9,795

JAN JUC PRECINCT	JJ 1 - Jan Juc	JJ 2 - Bells Blvd	TOTAL	TOTAL
Broadhectare (ha)	8			
Dwellings 2005 ₁	1,678	133	1,811	5,727
Existing Vacant Lots ₂	82	14	96	1,105
Unsubdivided Res Land ₃	0	0	0	1,090
Future Resubdivision ₄	0	8	8	1,300
Future Residential ₅	92	0	92	2,951
Future Low Density Residential	0	0	0	151
TOTAL LOTS	1,852	155	2,007	12,752
Estimated Capacity Population₆	3,557	298	3,854	24,490

- 1 As at October 2005 based on Shire survey.
- 2 As at October 2005 based on Shire survey.
- 3 Based on planning permits.
- 4 TN6 - assume every lot is resubdivided into 2 lots when reticulated water becomes available.
TC1 - assume 20% of lots subdivided into 2.5 (450), plus Zeally Bay Develmnt (140) + former school site (35).
TC4 - assumes around 9 lots per ha for land south of Deep Creek.
- 5 Assumes ave 12 lots per hectare.
- 6 Assumes occupancy rate of 83.5% & ave. household size of 2.3 people.

Sub-Precinct Map

